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GENERAL

CHAPTER I

LAND AND THE PEOPLE

AT its broadest extremities, India, which occupies an area of 1,269,640 square miles, covers a fifteenth of the earth's circumference. The Indian Union, which was proclaimed a Republic on January 26, 1950, comprises 14 States and six Union territories. The country is shaped like a triangle with its base resting on the Himalayas in the North. In the extreme south, the waters of the Indian Ocean wash ceaselessly against Cape Comorin, situated at the apex. Separated from the mainland of Asia by the towering Himalayan range, which has some of the highest peaks in the world, India is bounded on three sides by the sea. From west to east she has a common frontier with West Pakistan, Turkestan, Tibet, China, Burma and East Pakistan.

The Indian peninsula lies wholly to the north of the equator and can be divided into three regions according to physical and geographical conditions:

1. the snow-clad Himalayan range, with beautiful valleys running along it from Kashmir and Kulu in the extreme north-west to Assam in the north-east;
2. the triangular Deccan plateau in the south with the western and eastern ghats skirting the west and east coasts, respectively and the Vindhya hills as its base; and
3. the wide, fertile Indo-Gangetic plain, which lies between the other two zones.

The Himalayan chain forms a continuous northern boundary of 1,250 miles. The main Himalayas extend from the gorges of the Indus to those of the Brahmaputra. The Everest massif is the world's loftiest range. Many of its passes are higher than the peaks of the Alps. This immense rampart in the north has been an important barrier to Central Asian climatic influences and to the movement of peoples.

The Brahmaputra river, 1,800 miles long, originates in the western Tibetan plateau of the Himalayas and flows through Assam, watering its fertile rice fields. Both the Sutlej and Brahmaputra have long, gently sloping courses on the plateaus behind the main ranges, in which they have cut formidable gorges. The great Indian plain, alluvial in origin, begins in the west as a 300-mile wide belt and tapers gradually towards the east to a width of 90 miles. This great plain is watered by three main rivers—the Indus, Ganga and Brahmaputra. This is the most fertile part of India and a very high proportion of the population lives here. Parts of the west coast and central India are comparatively less fertile and portions of Rajasthan are almost arid.

South of the river Tapi, the western ghats rise to well over 3,000 ft. They present a remarkably straight and steep face to the Arabian Sea. As far as Goa they are formed of Deccan lava and are intersected by deep canyons. Further south, however, the hills are more rounded and not as high.

Between the eastern and western ghats lies the Deccan, a region of arid plateaus broken by low and broken hills along the watersheds. The great Deccan rivers—Mahanadi, Godavari, Krishna and Tungabhadra—are sluggish and flow in broad gently sloping valleys. Unlike the rivers draining the Himalayas, which are glacier-fed, they are entirely dependent on the monsoon and are practically dry in the hot weather.

CLIMATE

The great Himalayan wall effectively shuts out the strong Central Asian winds which would otherwise sweep over India. The climate, therefore, is influenced by other factors. The Tropic of Cancer passes through central India, dividing the sub-continent into two climatic zones. One should expect the north to be temperate and the south to be tropical. However, the Indian year can be broadly classified under three heads:

1. the cold season from November to February, characterized by low rainfall, except in the south-east;
2. the period March to June, hot and dry;
3. the monsoon between July and October.

This classification does not, of course, take into account the differences between the climatic zones. South-western and eastern India are distinctly tropical. The summers here, especially in the South, are humid, but the coal afternoon breeze from the sea in the coastal towns and from the rivers in the interior makes the heat more bearable. Strictly speaking, there is no cold weather in the South.

The climate is everywhere dominated by the seasonal rhythm of the monsoons, and about 85 per cent of the rain comes from the south-west monsoon between June and October. The onset of the monsoon at the end of May is marked by violent rain-storms. The temperature falls rapidly, but the relief from the excessive heat is to some extent offset by the unpleasantly high humidity. The rain decreases with distance inland.

Central and northern India have hot, dry summers, and in places which are away from the hills or the sea the heat becomes oppressive. Great dust-storms rage in the north-western plains. The winter in northern India is, however, mild and pleasant.

RESOURCES

India has large deposits of important minerals. She ranks seventh among the coal-producing countries of the world and mines 70 to 80 per cent of the world's supply of mica. There are rich reserves of high-grade iron ore as well as alloy minerals, fluxes and refractories. In addition to titanium, which is found in abundance, there are ample supplies of steatite, silica, monazite and industrial clays.

The position in regard to some rare and strategic minerals and chemicals is also quite good. In non-ferrous metals, however, India is not so well off. Besides coal, copper and aluminium are the only non-ferrous metals produced in any quantity. The most important mining area is the region comprising south Bihar, south-west Bengal and north Orissa.

The country's oil resources are being assessed and developed. Besides Digboi and Nahorkatiya in Assam, explorations are being carried on at Jaisalmer, Cambay and at Jwalamukhi in Rajasthan. With the completion of the Vishakhapatnam oil refinery, the country's total refining capacity is now approximately 4 million tons of crude off per year.

It is estimated that, at the end of 1961, India will be producing 60 million tons of coal, 12·5 million tons of iron ore, 2 million tons of manganese ore, 23·3 million tons of limestone, 1·97 million tons of gypsum and 1·75 million tons of bauxite.

The diverse rock formations of India constitute a rich source of building material. Teak, which is another important building material, is found in the eastern and western ghats. Ebony and bamboo are also plentiful.

PEOPLE

India's 362 million people (1951 census) constitute a seventh of the human race. The average density of population, which varies considerably from State to State, is 312 per square mile. There are 947 females for every 1,000 males. Only 17·3 per cent of the people live in cities and towns.

This vast population, which is second only to that of China, is made up of many racial strains. Various groups entered India at one time or the other between the older paleolithic and historical periods. Because of topographical conditions, the races which came earlier were not annihilated by the new settlers, but every incoming wave of conquerors pushed them southwards and eastwards.

They still contribute some of the main elements in the Indian population. The hills and forests provided shelter to a large number of primitive tribes who were left there undisturbed. This explains why some of the existing racial types in India retain primitive strains and have absorbed certain elements from the main divisions of mankind.

The people of India can be roughly divided into six racial groups. There are (1) Negrito; (2) Proto-Australoid; (3) Mongoloid; (4) Mediterranean; (5) Western Brachycephals; and (6) Nordic.

Broadly speaking, the blonde or partially blonde elements are to be found in the mountain valleys of north-western India, where they are mixed with Mediterraneans and Orientals. They can be clearly distinguished from the order Paleo-Mediterranean elements in peninsular India. The primitive, darker elements, which are found everywhere and derive their blood from other strains, especially the Paleo-Mediterranean, constitute the lower stratum of the population. The Mongoloid, who have intermingled with other groups, exist in the sub-montane regions of the North and East.

Seventy per cent of the people of India depend on agriculture for their livelihood. Of every 100 Indians, 47 are mainly peasant proprietors, nine mainly tenants, 13 landless labourers, one a landlord or rentier, 10 are engaged in industries or non-agricultural production, six in commerce, two in transport and 12 in the services and miscellaneous professions.

LANGUAGES

India is a land of many languages. Out of a total of 845 languages or dialects, the Constitution has recognized 14 languages, namely Hindi, Urdu, Punjabi, Telugu, Marathi, Tamil, Bengali, Gujarati, Kannada, Malayalam, Oriya, Assamese, Kashmiri and Sanskrit. Hindi, with the Devnagri script, has been declared the national language. English will, however, continue to be the official language till 1965.

Ninety-one per cent of the population speak one or other of the 14 languages, 3·2 per cent speak one or other of the tribal languages, and 5 per cent a dialect current among a lakh or more people. Nearly half the people speak Hindi, Urdu or Hindustani, whereas Telugu accounts for 10·2 per cent, Marathi 8·3 per cent, Tamil 8·2 per cent, Bengali 7·8 per cent, Gujerati 5·7 per cent, Kannada 4·5 per cent, Malayalam 4·1 per cent, Oriya 4 per cent and Assamese 1·5 per cent.

CHAPTER II

HISTORY

Little is known of early man in India, though some evidence has come down to us of the presence of paleolithic and neolithic men, both in the North and the South. Some scholars connect the neolithic communities of India with the primitive tribes of the Malay Peninsula, Indonesia and Indo-China.

INDUS CIVILIZATION

In 1921-22, two Indian archaeologists under the guidance of Sir John Marshall, then Director-General of Archaeology in India, excavated the remains of a chalcolithic civilization at Mohenjodaro (Larkana, Sind) and Harappa (Montgomery, Punjab). In the years following other archaeologists (Majumdar, Mackay, Vats and Stein) discovered more than 30 sites of the same culture in the Indus valley. Since the partition of India, about 30 similar sites have been discovered—25 in Bikaner Division of Rajasthan and the rest in the Saurashtra peninsula and in Ambala Division of the Punjab. The study of evidence from all these sites is not yet complete, but some facts are indisputable.

The Indus valley civilization flourished c. 3000 to 1500 B.C., and its centres were in planned cities. Elaborate systems of drainage and public baths were a conspicuous feature. Finds from the Indus valley as well as the Euphrates-Tigris valley bear ample testimony to the material prosperity of the Indus people and the close trade relations between the two regions. The Indus people domesticated animals such as cows, buffaloes, sheep, elephants, camels and perhaps dogs. They cultivated wheat and barley and made use of cotton. Their weapons of war were usually made of copper and bronze. Pottery-making was a highly developed industry, and the carpenter, blacksmith, stone-cutter, jewellery, goldsmith and ivory-worker all plied their trades with diligence. The houses were built of baked brick, which indicates that timber was then plentiful in what is now an arid area. The leadership of the community probably belonged to the merchants and industrialists, who procured the raw materials of industry from distant places and exported their manufactures, which included cotton fabrics, to distant places in Western Asia.

The Indus people used a pictorial script which has not yet been deciphered. From the seals and other objects, it appears that a Mother Goddess was worshipped and probably the cult of Siva (a Hindu deity) originated here.

The racial affinities of the Indus people have not been satisfactorily determined. Most scholars believe that they were a pre-Aryan people, while some identify them with the Dravidians. One fact is certain. The civilization was native to the soil and covered a considerable area.

Changes in the direction of the monsoon winds and the cutting down of forests probably contributed to the decline of the Indus valley civilization. The once prosperous cities succumbed to the Aryans, who appeared in the Indus valley with their own engine of war, namely, the horse. and superior weapons made of iron.

INDO-ARYANS: THE VEDAS

The Aryans invaded Indian in successive waves as part of the great migrations that spread from the Mongolian steppes in the East to the eastern shores of the Mediterranean in the West. It is not known when the first Aryan invasion of India took place. One view assigns the Aryan settlement in the land of the Sapta Sindhu to the middle of the second millennium B.C. This was roughly the age of the Rig Veda.

The Rig Vedic state was normally headed by a *rajan* (king) who ruled with the help of popular tribal bodien. The society, mainly rural, was based on the family. The families (*kulas*) were grouped into larger units and there were three distinct, though not rigid, classes of nobles and warriors, priests and sages and artisans and cultivators. These three orders were marked out from the original inhabitants, *i.e.*, Dravidians and pre-Dravidians.

There was, however, no ban on inter-marriage, change of occupation or commensality among the three orders, and even between Aryans and the original inhabitants.

The Rig Vedic Aryans were skilful farmers and knew the art of domesticating animals. They engaged in trade and may have known maritime navigation.

Their religion was mainly worship of the powers of Nature. The deities worshipped were Varuna (Sky), Surya (Sun), Agni (Fire), Indra (God of Thunder and Rain) and others. Sacrifices formed an important element of this religion and there was a constant tendency towards monotheism. Among the noblest hymns of the Rig Veda are those relating to Creation and the Primeval Germ (*Hiranyagarbha.*)

Aryan expansion over north India (up to modern Bengal) seems to have been completed by 1000 B.C. The later Vedas and the Upanishads and the Vedangas belong to this period. In the field of politics some of the tribal chiefs became more powerful by annexing territory at the cost of neighbouring Aryans as well as indigenous kingdoms. Changes of far-reaching importance took place in social organization, and the caste system became more rigid. The original inhabitants were not exterminated or segregated but were converted and brought into the Indo-Aryan social organization. The privileges of the Brahmans and the growing complexities of their rituals were, however, not to go unchallenged for long.

JAINISM AND BUDDHISM

The struggle against Brahmanism found expression in two new faiths—Jainism and Buddhism. Both Mahavira, the preceptor of Jainism, and his great contemporary Gautama, the founder of Buddhism, sprang from the Kshatriya clans of eastern India. The two new religions shared the belief in the transmigration of souls, but both rejected the authority of the Vedas and condemned animal sacrifices. While Jainism carried the doctrine of non-violence to extremes and prescribed rigid asceticism for salvation, Buddhism advised a "middle path" and abhorred mortification of the flesh as much as indulgence in sensual pleasures.

RISE OF MAGADHA: PERSIANS AND GREEKS

In political history next came the age of *Solasa Mahajanpada* (16 principalities: monarchical and non-monarchical). Of these, it was Magadha that ultimately united into a single State not only north (India) but also a considerable part of the South.

The urge for unification was the result of foreign invasions. About 518 B.C., the Persian Emperor Darius had annexed parts of the Indus valley. Within a few generations, however, the Persians lost their hold on the valley, which was parcelled out among a number of small but autonomous States. The short-lived Persian conquest of the Indian border-lands brought the two civilizations into intimate contact. A new script, namely, Kharoshthi, certain new political concepts and some other features of Indian culture are attributed to the Persian occupation. Indian ideas of religion and philosophy, on the other hand. spread to the lands around the eastern Mediterranean.

While the Persian hold over the Indus valley was weakening, Magadha under the Nandas was growing in power and expanding westwards. In 326 B. C. Alexander the Great invaded India, but he had to turn back at the Hydapses (Beas) for his home-sick troops refused to march against the Nanda Empire situated in the Gangetic valley. Alexander returned by way of the Indus, overcoming the strong resistance of the small autonomous tribes and cities. Greek rule in north-west India came to an end soon after Alexander's death.

THE MAURYAS: ASOKA

Chandragupta Maurya, who had supplanted the Nandas in Magadha, was the leader of a new national movement. He not only made himself master of northern India and forced Seleucus Nicator to surrender (c. 305 B.C.) the provinces of Kabul, Herat, Kandahar and Baluchistan, but possibly extended his empire to the south. His grandson Asoka ruled over an empire which stretched from the river Kabul to the river Brahmaputra and from Srinagar to Srirangapatnam.

Chandragupta Maurya and his advisers, of whom Chanakya was possibly one, not only drew upon Brahmanical political concepts and institutions but also Greek and Persian administrative ideas, which they altered to suit local needs. In diplomacy, military organization, civil government and the fine arts, Mauryan India attained a high level of accomplishment, but it was left to Chandragupta's grandson, Asoka, to win immortal fame for himself and his country.

Asoka fought a successful war in Kalinga (Orissa) but lost his peace of mind and finally sought refuge in the Buddha's tenets of non-violence and the Middle Path. He sent his missionaries of peace not only to the different parts of his empire but far beyond the imperial frontiers to Ceylon, his Hellenistic neighbours and Central Asia.

During the rule of Asoka's weak successors disruption set in. Provinces in the South as well as in the North revolted and the Greeks settled in Asia again invaded India.

NEW RACES: NEW IDEAS

For nearly 300 years (c. 200 B.C.—100 A.D.) north-western India was the scene of incursions, more in the nature of racial movements than military expeditions. Greeks, Scythians, Parthians and the Yueh-chi in turn invaded, conquered and settled in and around Kamboja-Gandhara, soon to be converted to the Indian way of life.

A Greek ambassador became an ardent worshipper of the god Vishnu, while the greatest Greek king in India became a patron of Buddhism. A Yueh-chi convert to Buddhism took an active interest in ideological controversy and contributed to the spread of Mahayana Buddhism in Sinkiang and Turfan. Some of the Scythian rulers of central and western India were champions of Sanskrit learning.

Indian civilization did not remain unaffected by these foreign contacts, particularly in the fields of fine arts and religion. Image-worship was little developed in early Brahmanism, and there was not much scope for it in the religion preached by Gautama Buddha and his disciples. It was during this period, however, that the Buddha image was evolved. The exact part played by foreign and indigenous tendencies in this evolution has not yet been accurately determined. The art of coinage attained perfection under Hellenistic and Roman influences.

It was during this period, too, that Christianity first reached India. The first Christian missionary probably came to north-western India in the 1st century A.D. The Syrian Christian Church of Malabar came into existence shortly afterwards.

The Greek settlements in India among other things contributed to more intimate trade relations between India and the Graeco-Roman Orient and with Rome itself. Embassies were despatched to Rome, and Indian traders carried arts and sciences to Alexandria. The most notable contribution that India made to the West was the decimal system of notation, which later came to be known as "Arabic Numerals".

The political picture of India during this period is not very clear beyond the fact that there were a number of dynasties both north and south of the Vindhyas. The Nagas in the North and the Satavahanas in the South were the most important.

THE GUPTAS: THE VIKRAMADITYAS

In the 4th century A.D., the Guptas of Pataliputra unified a large part of northern India. Some of the Gupta emperors assumed the title of *Vikramaditya* (Sun of Valour). The age of the Vikramadityas was an age of empire-builders, great poets, astronomers, metallurgists, sculptors and painters.

The Emperor Samudragupta was himself a great poet and musician. Kalidasa, the greatest of Sanskrit poets, flourished during the rule of the Guptas. The great epics, Ramayana and Mahabharata were, it is believed, finally edited during this period, which also saw the compilation of a major portion of the Puranas. Some of the best Brahmanical images date from the Gupta period. Most of the Buddhist wall paintings of Ajanta, too, were executed at this time. Indian coinage reached its perfection under Gupta rule. The iron pillar at Mehrauli (Delhi) is a fine specimen of Gupta metallurgy.

The King of Ceylon sent a mission to Samudragupta which was responsible for the construction of a monastery for Ceylonese pilgrims at Bodh Gaya. The Chinese traveller Fa-Hien visited India a little later (405 A.D.).

HARSHA AND PULAKESIN

The greatest of the Chinese traveller-pilgrims was, however, Hiuen-Tsang, who visited various parts of India between 629 and 645 A.D. At that time, Harsha was the chief potentate in north India and Pulakesin II Chalukya was the most powerful king of the South. Harsha was known for his scholarship, patronage of learning, philanthropy and toleration, though he himself was inclined towards Buddhism. Pulakesin II was superior to Harsha in military ability. His fame reached Khusru II, King of Persia, leading to an exchange of gifts and embassies.

From the middle of the 7th century, *i.e.*, roughly the time of the passing of Harsha and Pulakesin, there was no central power for nearly 100 years in the North or the South and, except for the powerful house of Kashmir, there was no leading dynasty.

THE RAJPUTS

From the second half of the 8th century A.D., new Kshatriya dynasties—the Rajput clans—appeared on the scene. They gradually spread all over North and Central India. The origin of the Rajputs is not very certain. According to some scholars, they were related to the Huns who had invaded India towards the end of the Gupta period and the aboriginal tribes who were gradually

Hinduized and finally admitted, through purificatory rites, to the Hindu social order as Kshatriyas in order to replenish the dwindling warrior order.

Among the new dynasties, the most important were the Gurjara-Pratiharas of the Aravalli-Himalaya-Narmada triangle, the Rashtrakutas of Maharashtra and the Palas of East India. All three houses were patrons of learning and the arts notwithstanding their heavy pre-occupation with war for the control of North India (800-1000 A.D.). As the symbol of imperial glory, Kanauj was the coveted prize in this triangular contest and often changed hands.

MUSLIM INVASIONS

The first Muslim invaders—Arabs—came to Sind in 711. Multan was captured in 713. The progress of the invader was cut short by the Pratiharas and the Guihlots of Chitor. Arab traders, along with the Parsis, who had left Persia with the spread of Islam, however, enjoyed the hospitality of the Rashtrakutas in the western ports. While the Pratiharas were essentially an inland power, the Rashtrakutas and the Palas also had maritime interests, the latter fostering colonial and commercial activities in the Malay Archipelago.

The second wave of Muslim invasions through the Hindu Kush began more than 250 years later and led to the establishment of Muslim rule in north India. The first important figure in these invasions was Mahmud of Ghazni. Mahmud led more than 15 expeditions to plunder the riches of the cities and temples of India. Though these expeditions were not intended for permanent conquest, they caused an enormous drain on the military and economic resources of the country. Mahmud also dealt a death blow to the Pratiharas, who constituted the principal resistance to Muslim expansion.

Nearly 200 years after Mahmud came Muhammad Ghori. He took full advantage of the disunity among the Rajput princes, particularly the quarrel between Prithviraj Chauhan (Delhi and Ajmer) and Jai Chand Rathor (Kanauj). The new invaders, mainly Turks and Afghans, came not so much in search of plunder as for permanent habitation in a kindlier climate. With mail-clad mounted soldiers born and brought up the hard way, Muhammad Ghori, assisted by Qutb-ud-Din, defeated the flower of Rajput chivalry at Thanesar (1192) and took in turn Ajmer, Delhi, Banaras and Gwalior and overran almost the whole of the Gangetic valley up to Bengal. After his death in 1206 Qutb-ud-Din took over the leadership of the invaders and became the first Muslim ruler in India.

SULTANATE OF DELHI

The dynasties that ruled from Delhi were the Slaves, the Khiljis, the Tughlaqs, the Sayads and the Lodis. The Khiljis annexed Malwa and Gujerat and penetrated to the far south. The Sultanate of Delhi, however, was intermittently engaged in resisting invasions from the Northwest. These invaders were Mongols, wandering in search of food and habitation. The first Mongol invasion of India was led by Chingiz Khan (1221 A.D.) in search of a political fugitive. The succeeding invasions were all plundering raids which had sometimes to be bought off. In 1398, Timur invaded India after over-running Central Asia. He came as far as Delhi, looting and killing without mercy. In 1526, Babar, who traced his descent from Timur on his father's side and Chingiz Khan on his mother's side, invaded India.

The Turks and Afghans who came with Muhammad Ghori and his successors settled down in North India with Delhi as their centre. Their rulers, known as Sultans, were mostly Turks, but the last of them at the beginning of the 16th century were Pathans. The Muslim invaders were not exactly like the Saka, Yueh-chi, Hun and other nomadic tribes. They had a well defined religion and they often came into conflict with the Hindus. Surprisingly enough, these conflicts were not numerous and were more political and economic than sectarian.

HINDU-MUSLIM CONTACTS

The impact of the two civilizations on each other was felt in literature, art and, last but not least, in metaphysical speculation and religion.

The capital of the Sultans was a centre of Islamic theology and classical studies, and it became as important as Baghdad and Cairo. Scholars and poets like Amir Khusru and Zia-ud-Din Barani collected at the Court of Delhi. Ibn Batuta, the great scholar and traveller from Africa, spent eight years in India on his way to China.

The buildings of the Sultans and the provincial governments indicate a blending of Hindu and Muslim ideas of architecture, and the style is called Indo-Saracenic.

Muslim scholars and saints were attracted to the philosophical background of Hinduism, and Muslim mysticism (Sufism) developed under the influence of Vedanta and Yoga.

On the other hand, the democratic character of Islam, too, made itself felt in Hinduism. If there were some who wanted to fortify Hinduism against the proselytism of Islam, there were a number of saints and scholars who preached the fundamental equality of all religions and prescribed devotion (*bhakti*) as the means of salvation. Among them, Kabir (b. about 1400 A.D.) and Nanak (b. 1469 A.D.) were the most famous. Nanak not only attacked bigotry, superstition and social privileges but also laid the foundations of a liberal, casteless community later known as the Sikhs.

HINDU KINGDOMS OF THE SOUTH

When the Muslims invaded north India, there were a few strong and prosperous Hindu kingdoms in the South. The Pallavas of Kanchi, who were warriors as well as builders in the days of Harsha and Pulakesin, were supplanted by the Cholas towards the second half of the 10th century A.D.

The greatest of the Chola rulers were Rajaraja the Great and his son Rajendra Chola. The father conquered the Laccadive and Maldive Islands, while the son sent his fleet as far as Martaban (Burma) and the Malay Peninsula and defeated Mahipala, ruler of eastern India. The Cholas also devised a highly practical administrative system.

The fall of the Cholas towards the beginning of the 12th century was followed by the rise of the Pandyas of Madura, the Hoysalas of Dorasamudra and the Yadavas of Devagiri. The Khiljis and Tughlaqs destroyed the Yadava and Hoysala kingdoms in the South towards the beginning of the 14th century.

Very soon another Hindu power rose around Vijayanagar on the banks of the Tungabhadra. A high level of material prosperity was attained by the Vijayanagar empire notwithstanding intermittent warfare with the Muslim rulers of the South. In 1565, the local Muslim dynasties joined together and inflicted a crushing defeat on the Vijayanagar forces at Talikota. This took place a few years after the Mughals, under Akbar, had finally vanquished the Pathans in north India.

VASCO DA GAMA

A more significant event had, however, taken place in the South 70 years before the fall of Vijayanagar. This was the opening of a direct sea route between India and Europe. In May 1498, Vasco da Gama, leader of a Portuguese fleet, reached Calicut. Henceforth, European merchants, armed with superior military equipment, were to dominate the Indian Ocean.

AKBAR THE GREAT

In north India, Babar's grandson, Akbar, extended Mughal power and, at the time of his death (1605), ruled an empire stretching from Kandahar in the West to Dacca in the East and from Srinagar in the North to Ahmedabad in the South.

Great as a warrior and conqueror, Akbar was greater as an organizer and statesman and as a patron of the arts and literature. Without proper education in his youth and perhaps not even literate, Akbar was endowed with a wonderful memory and a wide catholicity of mind. He chose his advisers and lieutenants irrespective of their race or creed. Thus, served by an able band of counsellors like Todarmal, Man Singh and Abdur Rahim, he consolidated his conquests and devised an administrative system which continued for generations. His counsellors included, besides soldiers and statesmen, scholars, poets and connoisseurs of art—Birbal, the master wit, Tansen, the great musician, Faizi, the Sufi poet and, above all, Abul Fazal, poet and scholar.

Akbar's buildings show, apart from magnificence, a perfect blending of the Indian and Saracenic styles. The new city of Fatehpur Sikri was not so much the capital of the Mughal Empire as a symbol of the Hindu-Muslim synthesis sought by Akbar. Muslims, Hindus, Zoroastrians and Christians all gathered at the Court of Fatehpur, where symposiums on different religions were held, perhaps the first of the kind in the history of the world.

The genius of Akbar was not merely academic. It found expression in politics and administration. Before Akbar, Zain-ul-Abdin, the Sultan of Kashmir (1420—1470), and Sher Shah, the Pathan Emperor of North India (1539-45), though devout Muslims had established perfect equality between Hindus and Muslims in public life. Akbar not only did the same by abolishing the hated poll-tax (*jizya*) on non-Muslims and throwing open official careers to the talented among them, but as an idealist went further in trying to bring about a synthesis of different religions.

Akbar's immediate successors—Jahangir, Shahjahan and Aurangzeb—were all able and vigorous rulers. However, **the collapse of the Mughal empire followed the passing** of Aurangzeb in 1707.

Jahangir and Shahjahan were lovers of pomp and magnificence, and some of the loveliest specimens of Mughal architecture, including the Taj Mahal, were built during their reigns. Aurangzeb, on the other hand, was a man of austere habits with a puritanical turn of mind.

AURANGZEB

In the art of war and military ability Aurangzeb was not inferior to the founders of the empire—Babar and Akbar. Yet, paradoxically, he was more responsible for the fall of the empire than anyone else. Under him, the

Mughal empire reached its greatest extent of territory. The Muslim kingdoms in the South (Bijapur and Golconda) were conquered and the rule of the Mughals extended up to the river Kaveri.

The *jizya*, however, was reimposed, and Hindus were discriminated against in many ways. Hindu temples were pulled down and the Guru of the Sikhs was executed.

The Rajputs, who constituted the strongest element in the Mughal imperial system, were alienated. The rising Maratha community in the Western Ghats was to become the mortal enemy of the Mughal empire.

The Marathas became a great power under Shivaji (1627-80) and during the weak rule of Aurangzeb's successors they built up a Hindu *Padshahi*, dominating the politics of both the North and South.

The Mughals lost their hold on Afghanistan, which soon became the base of freebooters like Nadir Shah and Ahmed Shah Abdali. When the Marathas and the Abdalis met at the historic field of Panipat (1761) the Marathas lost but the enemy did not gain control of India. The Mughal empire, virtually reduced to a few territories around Delhi, fell into insignificance. The provinces that nominally owed allegiance to it were more or less autonomous states.

The Marathas made another attempt to establish their imperial rule under Mahadaji Sindhia (d. 1794) but failed. Success, however, went to a body of foreign traders—the British East India Company, which had been founded in 1600.

ADVENT OF EUROPEAN NATIONS

The Portuguese were first among the European nations to trade directly with India and found settlements on the coasts. They were followed by the Dutch, English, Danes and French. Owing to their narrow outlook, the Portuguese failed to make any headway beyond retaining certain points on the west coast.

The Danes and Dutch were not able to expand their activities either, and the English and French were left to contend for the control of Indian trade. Both these

Powers took full advantage of the decline of the Mughal empire and lack of national consciousness among the various Indian powers.

BRITISH EMPIRE

At the end of the Napoleonic Wars (1815), the French settlements in India were confined to Mahe, Karaikal, Pondicherry, Yenam and Chandernagore, while the British held Bengal, Bihar and Orissa, a part of modern Uttar Pradesh, the Madras Presidency and the Bombay Presidency under their direct control besides exercising varying degrees of suzerainty over large parts of the country.

One obstacle to British expansion was the powerful Sikh kingdom under Maharaja Ranjit Singh (d. 1839). Sind was taken in 1843, and by 1850 Sikh resistance was crushed and the Punjab was annexed. Lower Burma, Nagpur and Oudh were annexed shortly after, Baluchistan in 1878 and Upper Burma in 1886. (Burma was made a separate unit of the British Empire in 1937).

The process that led to the conversion cf a body of traders into an imperial government started towards the end of the 18th century. In 1833, the trading functions of the East India Company in India were brought to an end and the Indian market was thrown open to individual private traders from England.

About the same time, English was officially adopted as the medium of instruction in the schools and colleges set up by the East India Company. Certain social reforms were also undertaken by the Company's Government, often at the instance of Indian reformers like Raja Ram Mohan Roy and Ishwarchandra Vidyasagar.

In 1853-54 steam power was introduced, cotton mills were started, railway construction begun and telegraph lines laid. Ancient industries, mostly small-scale and rural, fell before the onslaught of British imports, which were greatly facilitated by the development of communications.

In 1857, feelings against British rule culminated in a large-scale rebellion. This movement against alien rule was, however, largely confined to the Gangetic valley and

Central India. In Delhi, the puppet Mughal Emperor was made the symbol of the movement. The revolt was ultimately crushed and the rule of the Company was superseded by that of the Crown. The old Mughal Emperor was tried in a British court, dethroned and exiled to Burma.

The political pattern of India from the time of the assumption of rule by the Crown until 1947 shows two distinct facets. The territories which were conquered and annexed by the East India Company and its successor, the Government of India, were formed into provinces ruled directly by the British. The heads of the major provinces were designated Governors or Lieutenant-Governors for some time, while the heads of the minor provinces were called Chief Commissioners.

On the other hand, the States which accepted the protection of the British were left to the ruling dynasties under the overall supervision of Britain's paramount power. The Governor-General of India, called the Viceroy or Crown Representative for the purpose of representing the paramount power, exercised control through Agents.

From about the end of the first World War, the people in the British Provinces came to be associated with the Provincial Governments in larger measure than before. Some changes were also made in the Central Government in so far as the Government of British India was concerned.

END OF BRITISH RULE

The movement for self-government, initiated in the 1880's under the leadership of David Hume, Surendra Nath Banerjee, Bipin Chandra Pal, Dadabhai Naoroji, Pherozeshah Mehta and others, later gained in tempo under the leadership of Tilak, Gokhale, Lajpat Rai and Annie Besant. The victory of Japan over Russia and the revolution in China exploded the myth of Asian backwardness, while the successful resistance to the partition of Bengal, carried out by various means—constitutional agitation, economic boycott and terrorism—turned the nationalist movement into a real danger to the British empire.

India's support of the Allies in the first World War was largely conditioned by the expectation of self-government. The reforms introduced after the War did not fulfil these expectations, and the Indian National Congress under the leadership of Mohandas Karamchand Gandhi organized the non-violent non-cooperation and civil disobedience movements. The reforms of 1935 also fell short of Indian expectations.

The second World War broke out at a critical moment in India's history. India was made party to it without her consent. The civil disobedience and "Quit India" movements inside India and the formation of an Indian National Army in South-East Asia led to far-reaching changes, and the British finally withdrew from India at the end of the War.

On August 15, 1947, the dominions of India and Pakistan came into being. The British also withdrew from the Indian Princely States.

By January 1, 1950, mainly through a process of negotiation carried on under the supervision of the late Sardar Vallabhbhai Patel, all the 552 Princely States contiguous to the territory of India, with an aggregate population of nearly 60 million, were integrated into the Indian Union and their governments democratized. Some of these States merged into the adjoining Indian Provinces. Others were grouped into Unions of States, while others became centrally-administered Chief Commissioners' States.

The work of constitution-making having been completed by November 1949, the new Constitution came into force on January 26, 1950. The first general elections under the new Constitution, based on universal adult franchise, were held between October 1951 and February 1952. The elections returned the Indian National Congress to power with an absolute majority in the Centre and most of the States. The second general elections, held in early 1957, followed the same pattern.

In March 1950 a Planning Commission was set up by the Government of India with a view to formulating plans for the rapid economic development of the country. The first Five Year Plan, which was launched in April 1951, was successfully implemented and a second Five Year Plan was initiated in 1956.

On November 1, 1956, the political reorganization of the States was effected. India now consists of 14 States and six Territories.

CHAPTER III

THE CONSTITUTION

On January 26, 1950, India's Constitution, the first charter of her freedom, came into force. Since then it has been amended seven times. It is a comprehensive document comprising 397 articles and nine schedules.

India is a sovereign democratic republic. She continues to be a member of the British Commonwealth of Nations by choice. Membership of the Commonwealth does not detract from India's sovereignty.

India is a secular State. Subject to public order, morality, health, etc., the people are entitled to freedom of conscience and the right to practise and propagate religion. In respect of civic rights, services and obligations, no discrimination is made on grounds of religion, race, caste or sex.

FUNDAMENTAL RIGHTS

The Constitution includes a very elaborate declaration of human rights. It guarantees to all citizens freedom, equality and other rights relating to the freedom of religion, property, culture, education and constitutional remedies. It also sets out certain Directive Principles which seek to regulate State policy with a view to securing a social order in which social, economic and political justice will pervade the institutions of national life.

For the first time in its history the country has achieved political unity and territorial integrity. India is a federation of States, none of which can secede from the Union. There is a unified administration under a single Constitution.

The Indian Union is a federal structure with residuary authority vested in the Centre. Unity of administration is assured through a single judiciary, uniformity in basic laws, common all-India services and a common official language.

Flexibility is an important feature of the Constitution. It has evolved a simple process of amendment. Furthermore, it enables the federal structure of government to be converted into a unitary system in an emergency. The Central Government can then control all the State Governments and Parliament can exercise the legislative powers ordinarily vested in the States.

The Government of the Indian Republic is a government by the people, both at the Centre and in the States. It is a parliamentary form of government. All adult citizens have the right to vote. This makes India the largest among the existing democracies of the world. The electorate is estimated at a twelfth of the world's population, four times the population of the United Kingdom and 25 million more than the population of the U.S.A.

Village panchayats, functioning as units of self-government in the various States, ensure the democratic character of the constitutional structure.

UNION GOVERNMENT

At the head of the Union Government is a President, indirectly elected for five years by an electoral college consisting of the elected members of both Houses of Parliament and the Legislative Assemblies of the States. The election is held in accordance with the system of proportional representation by means of the single transferable vote.

The Vice-President of the Indian Union is *ex-officio* Chairman of the Council of States. He is elected by the members of both Houses of Parliament assembled at a joint meeting.

The real executive is the Council of Ministers with the Prime Minister at its head. The Council of Ministers is collectively responsible to the House of the People. The Constitution ensures the leadership and predominance of the Cabinet.

PARLIAMENT

The Central Legislature is known as Parliament. It consists of two Houses—the Council of States (Rajya Sabha) and the House of the People (Lok Sabha).

The Council of States is a permanent body elected indirectly. A third of its members retire every second year. It has a maximum strength of 250 members. Of these, 12 are nominated by the President from among well-known personalities in the realms of the arts, literature, science and social service. The House of the People consists of not more than 520 elected members, and its life does not ordinarily exceed five years.

STATE GOVERNMENTS

Except in Jammu and Kashmir, the executive authority of a State is vested in the Governor. The Council of Ministers, with a Chief Minister as leader, aids and advises him. He is appointed by the President for a term of five years.

In Bihar, Bombay, Madras, Madhya Pradesh, Mysore, Punjab, U.P. and West Bengal, the Legislatures have two chambers while other States have unicameral Legislatures. The Upper House in these eight States is known as the Legislative Council. Where the Legislature consists of only one House, it is called the Legislative Assembly.

The Legislative Assembly of a State is elected on the basis of adult franchise. The total number of its members cannot be more than 500 or less than 60. The Legislative Council is a permanent body and a third of its members retire every two years. It cannot have less than 40 members and not more than one-third of the membership of the Legislative Assembly of the State.

In the case of Jammu and Kashmir, the power of Parliament to make laws is limited to those matters in the Union and Concurrent Lists which, in consultation with the Government of the State, are declared by the President to correspond to matters specified in that behalf in the Instrument of Accession. It can also extend to such other matters in those Lists as may be mutually agreed upon by the Government of the State and the Government of India. Under the Constitution (Application of Jammu &

Kashmir Order, 1954) parts I, II, III, V and XI to XXII of the Constitution of India apply to Jammu and Kashmir with appropriate modifications. The Supreme Court now exercises practically the same jurisdiction in Jammu and Kashmir as in other parts of the country. The financial relationship as well as the allocation of taxation powers between the Centre and Jammu and Kashmir State are also the same as those existing between the Union Government and other States. According to the Constitution adopted by the State, the executive authority is vested in the Sadar-i-Riyasat, elected by the Legislative Assembly by a majority of the total membership of the Assembly. He holds office during the pleasure of the President. The State has a parliamentary form of Government, the legislature consisting of two Chambers.

NATIONAL FLAG

The National Flag of India is a horizontal tricolour of deep saffron, white and dark green in equal proportions. Saffron is at the top, white in the middle and green at the bottom. The emblem of the flag is an exact reproduction of the wheel on the capital of the Asoka pillar at Sarnath. It is superimposed on both sides of the flag, and is as broad as the white strip. The wheel has twenty-four spokes. The colour of the emblem is navy blue.

The origin of the tricolour dates back to 1921 when, during the session of the All India Congress Committee meeting at Bezwada (now Vijayawada), an Andhra youth presented Mahatma Gandhi with a flag of red and green, the colours representing the two major communities of India. Mahatma Gandhi suggested the addition of a white strip to represent the rest of India's communities and the *charkha* (spinning-wheel) to symbolize progress. In 1931, when the All India Congress Committee officially adopted the tricolour as India's national emblem, it was emphasized that it bore no communal significance and was to be interpreted thus: "saffron for courage; white for truth and peace, and green for faith and chivalry".

On July 22, 1947, the Constituent Assembly adopted this tricolour as India's National Flag, but the *Dharma*

Chakra of the Emperor Asoka was adopted instead of the *charkha*. "The wheel," said the Prime Minister, "is a symbol of India's ancient culture; it is a symbol of many things that India has stood for through the ages." The *charkha* had to be replaced because its inclusion entailed the violation of certain heraldic rules.

The colours and their significance remained the same as before. Dr. Radhakrishnan interpreted the colours in philosophical terms. The saffron colour, according to him, denoted renunciation. The white in the centre was light, the path of truth to guide our conduct. The green signified our relation to the soil, "our relation to the plant life here on which all other life depends". The Asoka wheel in the centre is the wheel of the Law of Dharma. "*Satya* or Truth, *Dharma* or Virtue," he said, "ought to be the controlling principles of all those who work under this flag. Again the wheel denotes motion.........the wheel represents dynamism and peaceful change."

NATIONAL ANTHEM

On January 24, 1950, the Constituent Assembly of India adopted *Jana-gana-mana* as the National Anthem. It was composed by the late Rabindranath Tagore in 1912. It was also decided that Bankim Chandra Chatterjee's famous invocation, *Vande Mataram*, would enjoy an equal status.

These two songs vied with each other for the status of the National Anthem. Each had a hallowed history. Each was the work of one of India's greatest writers.

Of the two songs, *Vande Mataram* is the older. It occurs in Bankim Chandra's novel *Ananda Math*, published in 1882. The first political occasion on which it was sung was the 1896 session of the Indian National Congress. It was set to music by Rabindranath Tagore. Gradually the first two words of the song became the slogan of the national movement. In fact it has inspired some of the greatest sacrifices in history. The only difficulty in adopting *Vande Mataram* as the National Anthem seems to have been that it does not lend itself to harmonization.

Jana-gana-mana was described by Mahatma Gandhi as a devotional hymn. It was first published in January 1912 in *Tattvabodhini Patrika,* of which Dr. Tagore himself was the editor. The poet rendered it into English in 1919 under the title "The Morning Song of India". The song was first sung at a political meeting on December 27, 1911, the second day of the Congress session, and struck the audience as distinctive and dignified.

CHAPTER IV

JUDICIARY

SUPREME COURT

India has a well-integrated and independent judiciary. At the apex stands the Supreme Court, which consists of a Chief Justice of India and a maximum of 10 other Judges. The Chief Justice is appointed by the President, who consults such Judges of the Supreme Court and High Courts as he may deem necessary. The Judges of the Supreme Court are appointed by the President after consulting the Chief Justice. They hold office till the age of 65 and can be removed on the ground of proved misbehaviour or incapacity.

The Supreme Court normally sits at Delhi. It has wider powers than the highest court in any federation of the world, including the Supreme Court of the U.S.A. As a court of record, it has all the powers of such a court, including power to punish for contempt of court. It is both a final interpreter of the Constitution and a final court for civil appeal. In criminal matters it is empowered with criminal appellate jurisdiction in certain specified cases.

The original jurisdiction of the Supreme Court extends to all disputes except those arising out of the provisions of treaties and agreements with Indian States, between the Union and a State or between States. The appellate jurisdiction is three-fold—constitutional, civil and criminal. In constitutional matters, an appeal will lie if the High Court certifies that the case involves a substantial question of law regarding the interpretation of the Constitution. Special leave can also be granted by the Supreme Court if it is satisfied that the case involves such a question. In civil cases an appeal will generally lie to the Supreme Court if the High Court certifies that the value of the subject-matter of the dispute or the amount of the claim involved is not less than Rs. 20,000 or that the case is a fit one for appeal to the Supreme Court. In criminal matters, an appeal will lie to the Supreme Court if the High Court has (i) in an appeal reversed the order of acquittal of an accused person and sentenced him to death, or (ii) withdrawn for trial any case from any court subordinate to its authority and in such trial convicted the accused person and sentenced him to death, or (iii) certified that the case is a fit one for appeal to the Supreme Court. The appellate jurisdiction in criminal matters can be extended by Parliament by law subject to such conditions and limitations as may be specified therein.

The Supreme Court also inherits the jurisdiction and powers of the Federal Court with respect to matters not specifically mentioned in the Constitution. It possesses a vast revisory jurisdiction over all courts and tribunals. It can grant special leave for appeal from the judgment or order of any court or tribunal in the country except a court or tribunal constituted by or under any law relating to the Armed Forces. It is also vested with powers to issue directions or orders which are in the nature of writs of *habeas corpus*, *mandamus*, prohibition, *quo warranto* and *certiorari* or any of them for the enforcement of fundamental rights. This jurisdiction, however, is not exclusive; the High Courts of the various States enjoy concurrent jurisdiction.

The Supreme Court also has certain advisory functions. The President can refer to it any question of law or fact of public importance for an opinion.

Under the Constitution, every judgment of the Supreme Court has to be delivered in public and must have the concurrence of the majority of Judges present at the hearing of the case. If a Judge differs from his colleagues, he can deliver a dissenting judgment.

As the highest tribunal of the land, the law declared by the Supreme Court is binding on all courts in India. Subject to the provisions of any law made by Parliament and the provisions of any rules made by it, the Supreme Court also has the power to review its judgments and orders.

HIGH COURTS

At the head of the judicial administration in every State there is a High Court. After the reorganization of the States there are now 14 High Courts in the country. The actual number of Judges, including the Chief Justice, is determined by the President. The appointment of the Judges is made by the President after consulting the Chief Justice of India and the Governor of the State. In the case of the appointment of a Judge other than a Chief Justice, the Chief Justice of the High Court is also consulted. A Judge of a High Court holds office till the age of 60.

The State Legislature is not authorized to alter the constitution or the organization of a High Court. This authority is vested in Parliament. Power to remove a High Court Judge is also vested in Parliament.

Subject to the provisions of the Constitution and any law made by the legislature, the High Courts possess the same jurisdiction and powers which they enjoyed before the commencement of the Constitution in 1950. Limitations on their original jurisdiction over matters concerning revenue and its collection have, however, been removed.

They are also given powers of (1) issuing writs for the enforcement of fundamental rights; (2) superintendence over all courts in the State other than those constituted by or under any law relating to the Armed Forces, and (3) taking over cases from subordinate courts involving questions regarding the interpretation of the Constitution. They can call for returns from the courts, make and issue general rules and prescribe forms to regulate their practices and proceedings and determine the manner and form in which books, entries and accounts are kept.

SUBORDINATE COURTS

Except for small local variations, the structure and functions of the subordinate courts are more or less uniform throughout the country. Each State is divided into a number of districts, each under the jurisdiction of a principal civil court presided over by a District Judge.

Below him there is a hierarchy of civil judicial authorities in every district.

District Judges are appointed by the Governor of the State in consultation with the High Court concerned. The same procedure is adopted in the case of postings and promotions. Appointments of persons other than District Judges to the judicial service of a State are made by the Governor in accordance with the rules made by him after consultation with the State Public Service Commission and the High Court. Control over district and other subordinate courts and the power of postings and promotions and of granting leave to persons belonging to the judicial service holding posts inferior to that of the District Judge is vested in the High Court.

In addition to hearing suits, the civil courts exercise jurisdiction over several other matters, such as guardianship, marriage and divorce, testamentary and intestate representation and admiralty jurisdiction. The decisions of the various administrative officers or tribunals in relation to cases arising under the Land Acquisition Act and the Forests Act are also subject to the appellate authority of the appropriate civil courts.

There are certain cases affecting civil rights which are tried by administrative or quasi-judicial tribunals or other statutory bodies. Their appeals do not necessarily lie to civil courts; the parties frequently invoke the intervention of the High Courts for writs.

On the criminal side, the officer presiding over the district court for civil suits is also the Judge of the Sessions Division for criminal cases in that district. The Sessions Judge is assisted by Additional or Assistant Sessions Judges. These officers are directly subordinate to the High Court and are comparatively independent of the executive. These courts gnerally take cognizance of serious crimes and deal with cases only when they have been committed to them by magistrates after preliminary enquiries.

The exercise of preventive jurisdiction in certain matters and the trial of crimes other than those triable by a sessions court are entrusted to magistrates of various classes under the general supervision and control of the

District Magistrate.

PANCHAYAT ADALATS

In pursuance of a directive of the Constitution, most States have passed legislation for forming a network of panchayats (local bodies). The judicial wing of a panchayat deals with small cases. It makes enquiries locally and decides cases on the spot. No appeal is normally allowed against its decision unless there is a gross miscarriage of justice proved to the satisfaction of a civil judge or a magistrate, when a retrial is ordered.

These judicial panchayats are elected by village assemblies. In U.P., for instance, the Gaon Sabha, which comprises the entire population of a village, elects five trustworthy persons to act on a judicial panel of 25 to 30 persons in a unit of five or six contiguous villages. Every petty case, civil or criminal, arising in the unit is referred, in accordance with the rules, to a tribunal of five nominated out of this panel—one or two from the village where the parties reside and the rest from neighbouring villages.

INDEPENDENCE OF JUDICIARY

Besides a directive, the Indian Constitution has adopted special provisions to give the Judiciary an independent status. To ensure the independence of the Supreme Court, the Chief Justice of India is authorized to recruit staff and to frame rules regarding conditions of service. To this end also, the administration expenses of the Supreme Court, including salaries, allowances and pensions payable to its officers and servants, are charged on the Consolidated Fund of India and all fees and other moneys taken by the Court form part of that Fund. The Constitution also debars Judges from practising in lower courts in India after retirement. Similar safeguards are provided in the Constitution for securing the independence of the High Courts.

In conformity with the Directive Principles of the Constitution regarding the separation of the Judiciary from the Executive, various States have taken steps in this direction.

LAW COMMISSION

On August 5, 1955, the Government appointed a Law Commission with Mr. M. C. Setalvad, Attorney-General of India, as Chairman, to review the system of judicial administration and suggest ways of improving it and making justice speedier and less expensive. The Commission is also examining various laws and Central Acts of general application and importance and will suggest lines on which these should be amended, consolidated or otherwise brought up-to-date.

STATE

CHAPTER V

REORGANIZATION OF STATES

One of the major tasks that confronted free India was political consolidation. She inherited an administrative set-up of British India which was shaped not by scientific planning but by "the military, political and administrative exigencies or conveniences of the moment". This set-up had little or no relation to historical, linguistic or rational principles.

The reports of numerous statutory commissions recommending the re-drawing of provincial boundaries did not bring out any clear idea as to the basis on which such reorganization should be attempted. It was only in 1920 that the Indian National Congress at its Nagpur Session accepted the principle of linguistic redistribution of Provinces as a political objective. The British Government lent only qualified support to the linguistic principle in making territorial adjustments between various administrative units.

INTEGRATION OF PRINCELY STATES

After the partition of the country in 1947, the map of India looked like a jigsaw puzzle, the large number of its units skilfully pieced together to produce a picture of spurious unity. With the lapse of paramountcy, it was left to the rulers of some 550 semi-autonomous princely States to decide the future constitutional status of their territories. On the morrow of freedom, India was thus faced with the threat of being broken up into a large number of independent enclaves, big and small. This balkanization would have destroyed all prospects of unity and peace in the country, wrecked its economy and undermined its security.

The Government of India suggested that the autonomous States situated in Indian territory should accede to the Indian Union. Sardar Patel, the chief architect of political integration in India, warned the Princes against the consequences of their refusal to co-operate. He said: "I hope the Indian States will bear in mind that the alternative to co-operation in the general interest is anarchy and chaos, which will overwhelm great and small in a common ruin if the States and Provinces are unable to act together in the minimum of common tasks".

The Princes acted with foresight and political wisdom. They did not cling to their time-worn treaties with the British, so that in January 1948 Sardar Patel was able to tell the country that all the States contiguous to Indian territory, except Hyderabad and Junagadh, had acceded to the Indian Union. Junagadh became part of the new State of Saurashtra in January 1949. Hyderabad, which is situated in the heart of the Deccan Plateau, did not however accede immediately. Effective power had passed into the hands of a small band of extremists called Razakars, who sought to buttress feudal elements in the State through a campaign of terror. The Government of India's police action was bold and swift. In five days, normal constitutional authority was restored in the State and the Nizam was once more free to exercise his will. Subject to ratification by the people of his State he decided to accede to India.

Once all the States had rallied under the national flag, the Ministry of States of the Central Government set to work on a plan of unification. Most of the States were too small to be governed by independent administrative and political units. Consequently, except in the case of a few big States like Mysore, the people had for a long time been denied the benefits of large-scale economic organization and their standards of life were lower than in the rest of India. Also, anachronistic inter-State customs barriers stood in the way of the free flow of goods from one region to another.

A two-fold reform was, therefore, suggested to end this state of affairs. The first stage was the consolidation of the princely States into viable economic and administrative units. This was done in three ways: (a) some of the States were merged in the adjoining Provinces; (b) a few States were grouped into Unions of States; and (c) others were taken over to be administered by the Central Government. The States of Jammu and Kashmir, Mysore and Hyderabad were, however, allowed to continue as separate units.

This remarkable change started with the Chattisgarh States, which merged with the province of Orissa on January 1, 1948. The last State to merge was Cooch-Behar, which joined West Bengal on January 1, 1950. In all, 216 States with a total area of 108,739 square miles and a population of 19·158 million were involved in this process of merger.

The States taken over as centrally-administered areas numbered 61 with an area of 63,704 square miles and a total population of 6·925 million. These were formed into seven centrally-administered areas.

The first Union of States was born when 217 Kathiawar States and hundreds of estates joined to form a new union called Saurashtra. Altogether, 275 States were integrated into five such Unions of States, covering an area of 215,450 square miles with a population of 34·7 million.

The second stage in the reform was the introduction of democratic institutions in these States, which had hitherto been governed by autocratic rulers. Immediately after January 26, 1950, popular governments were formed in all the States, and in the first general elections the people of the States elected their representatives to the various legislative assemblies.

In less than two and a half years after freedom, the process of territorial integration was complete. This ingenious reform, boldly conceived and swiftly executed, ended several anachronistic sovereignties and exorbitant princely privileges. In the entire history of the world there has been no comparable revolution.

DISPARITIES AMONG STATES

The integration of the princely States, however, left the various units of India in different stages of development. Some transitional expedients had therefore to be evolved to fit these units into the constitutional structure of India, which added to the disparities already existing among the British Indian Provinces. It is for this reason that the Indian Constitution, which came into force on January 26, 1950, classified the States of the Indian Union into three categories, namely, Part A, Part B and Part C States. The nine Part A States represented the former Governor's Provinces, the eight Part B States included five unions of States and the States of Jammu and Kashmir, Mysore and Hyderabad, and the 10 Part C States comprised the former centrally-administered areas and Chief Commissioner's Provinces.

BASIS FOR REORGANIZATION

The Linguistic Provinces Commission, which was appointed after Independence, and the three-man Congress Committee which investigated the reorganization of States opposed the formation of States only on linguistic principles and urged that in creating a State the primary consideration should be the security, unity and economic prosperity of the country. Meanwhile, the emotional integration of different linguistic groups brought about by a century of vigorous development of the regional languages found expression in the demand for the creation of States in terms of linguistically homogeneous units. This culminated in the formation of a separate State of Andhra in 1953.

The imperative need for reviewing the problem in terms of stable and economically viable units was seriously felt when the country launched her first Five Year Plan. The successful implementation of the Plan and proper mobilization of the country's resources called for further integration and rationalization of the States' structure. The problem had to be approached objectively and dispassionately so that the welfare of the people of each State as well as the nation as a whole could be promoted. Finally it was realized that further deferment of a general reorganization would cause dissatisfaction and disappointment among a large number of people in the country.

STATES REORGANIZATION COMMISSION

The task of undertaking this review and making recommendations to the Government of India was entrusted to the States Reorganization Commission, appointed in December 1953. Comprised of Mr. Fazl Ali as Chairman, and Mr. H. N. Kunzru and Mr. K. M. Panikkar as members, the Commission toured the country, visited 104 places and interviewed more than 9,000 individuals. In all, 152,252 memoranda from various persons, parties and associations were received. In September 1955 the Commission submitted its report, proposing a scheme of reorganization in which the component units of the Indian Union were to consist of "States" forming federating units of the Union and "Territories" which were to be centrally administered. In making its proposals, the Commission was guided by certain broad principles enumerated in its terms of reference, such as the preservation and strengthening of the unity and security of India, linguistic and cultural homogeneity, financial, economic and administrative considerations and the successful implementation of the Five Year Plan. Each case was considered on its merits and the conclusion arrived at on the basis of a balanced approach to these various considerations. The 15 States proposed by the Commission were: Andhra, Assam, Bihar, Bombay, Hyderabad, Jammu and Kashmir, Kerala, Karnataka, Madras, Madhya Pradesh, Orissa, Punjab, Rajasthan, Uttar Pradesh and West Bengal. The Commission recommended that all Part C States should be abolished, but retained three Territories, namely, Delhi, Manipur and the Andaman and Nicobar Islands as centrally-administered areas. The Chairman recommended that Himachal Pradesh should also be a centrally-administered territory, while Mr. Panikkar favoured the creation of a new State, to be called the State of Agra, comprising parts of Uttar Pradesh, Madhya Pradesh and Vindhya Pradesh.

NEW REORGANIZATION SCHEME

On October 10, 1955, the Government released the Commission's report for eliciting public opinion. In addition to

122,150 memoranda and representations received the report was discussed by the legislatures of all the States and by the Lok Sabha (House of the People) and the Rajya Sabha (Council of States). On January 16, 1956, the Central Government formulated its decisions on most of the recommendations of the Commission. In this respect, the Government's approach was to adhere to the Commission's recommendations and to alter them only if modifications were called for either by a clear and unequivocal expression of popular wishes or by mutual agreement among the parties concerned. The formation of Punjab, Bombay and Maharashtra States and the separate existence of Hyderabad were among the most controversial issues. Although the Punjab issue was amicably settled, there was a great deal of agitation with respect to the other States. After prolonged discussions and negotiations, it was finally decided that Bombay would be a bilingual State comprising Kutch, Saurashtra, the Marathi-speaking areas of Hyderabad and Madhya Pradesh and the whole State of Bombay minus the Kannada-speaking areas and Banaskantha district. The Telugu-speaking areas of Hyderabad State were merged with Andhra. Three draft bills incorporating the decisions of the Government of India were referred to the State legislatures for expression of their views. They were later discussed in Parliament and, after some amendments, were passed in September 1956.

The whole scheme of reorganization is based on three Acts, namely, the States Reorganization Commission Act, 1956, the Bihar and West Bengal (Transfer of Territories) Act, 1956, and the Constitution (Seventh Amendment) Act, 1956. According to these, the Indian Union comprises 14 States and six Territories. More than 98 per cent of the total population of the country is covered by the new States and less than 2 per cent is left under the Territories. The scheme does not bring about any territorial change in the States of Assam, Orissa, U.P. and Jammu and Kashmir. There is one entirely new name—Kerala—which largely represents the old State of Travancore-Cochin. The enlarged Andhra State is renamed Andhra Pradesh.

NEW STATES

The area, population and capitals/headquarters of the States and Territories comprising the Indian Union are as follows:

Sl. No.	State/Territory	Area (in sq. miles)	Population	Capital/ Headquarters
1	2	3	4	5
	States			
1	Andhra Pradesh	105,963	31,260,605	Hyderabad
2	Assam	85,012	9,043,707	Shillong
3	Bihar*	67,300	..	Patna
4	Bombay	190,919	48,263,515	Bombay
5	Jammu and Kashmir	92,780	4,410,000	Srinagar
6	Kerala	15,035	13,550,631	Trivandrum
7	Madhya Pradesh	171,201	26,072,340	Bhopal
8	Madras	50,110	29,974,155	Madras
9	Mysore	74,326	19,399,363	Bangalore
10	Orissa	60,136	14,645,946	Bhubaneswar
11	Punjab	47,456	16,134,890	Chandigarh
12	Rajasthan	132,078	15,971,997	Jaipur
13	Uttar Pradesh	113,409	63,215,742	Lucknow
14	West Bengal*	33,805	..	Calcutta
	TOTAL	1,239,530	..	
	Territories			
1	Andaman and Nicobar Islands	3,215	30,971	Port Blair
2	Delhi	578	1,744,072	Delhi
3	Himachal Pradesh	10,904	1,109,466	Simla
4	Laccadive, Minicoy & Aminidivi Islands	10	21,441	..
5	Manipur	8,628	577,635	Imphal
6	Tripura	4,032	639,209	Agartala
	Total	27,367	4,122,614	
	Grand Total	1.266,897		

*Provisional

The rationalization of the former ill-assorted administrative areas into a coherent and balanced pattern stands out among the significant achievements of the infant Indian Republic. The principal features of the reorganization scheme are: (1) the setting up of larger States, (2) the disappearance of Part 'C' States, (3) the elimination of the distinction between Part 'A' and 'B' States and the removal of the institution of Rajpramukhs, former heads of the Part 'B' States. Indeed, there is no parallel in the world to such a peaceful and democratic reorganization of a large country. The perspective of national unity in India is admirably summed up by the States Reorganization Commission in the following words:

"It is the Union of India that is the basis of our nationality. It is in that Union that our hopes for the future are centred. The States are but the limbs of the Union, and while we recognize that the limbs must be healthy and strong, and any element of weakness in them should be eradicated, it is the strength and the stability of the Union and its capacity to develop and evolve that should be the governing consideration of all changes in the country."

One innovation in the new set-up is the establishment of five zonal councils which will provide a forum for inter-State co-operation in the settlement of disputes and the promotion of development plans. In the States of Punjab and Andhra Pradesh, regional committees of the legislatures have been constituted with the object of catering for the special needs of the regions concerned within the framework of a unified State structure.

SAFEGUARDS FOR LINGUISTIC MINORITIES

Most of the recommendations made by the Reorganization Commission in regard to providing safeguards for linguistic minorities have been accepted by the Government. The right to education in the mother tongue at the elementary stage has been given constitutional recognition and the State Governments have been advised to take steps to provide for the use of minority languages for certain official purposes and to secure for linguistic minorities liberal facilities in respect of secondary education and recruitment to State services. The Constitution (Seventh Amendment) Act, 1956, also provides for the appointment of a special officer for linguistic minorities. He will report to the President on the working of safeguards and his reports will be laid before each House of Parliament and communicated to the Governments of the States concerned.

CHAPTER VI

GENERAL ELECTIONS

By entitling every adult to vote, India's Constitution has enfranchised over 190 million Indians, 45% of them women. This vast electorate represents over a fifteenth of the entire population of the world.

FIRST GENERAL ELECTION

In the first General Election, the first State to go to the polls was Himachal Pradesh, on October 25, 1951, and elections in 25 other States were held soon after. By March 1952, polling for the lower Houses was over. Unprecedented in magnitude in the history of any democratic country in the world, these elections were held to seat 4,066 members in the Council of States, House of the People, Legislative Assemblies of the States and Electoral Colleges. In all, 132,560 polling stations with 196,084 booths were provided in 3,194 constituencies. Of these, 2,438 were single-member constituencies, 664 constituencies elected two members each and two constituencies elected three members each. Constituencies where electors belonging to the Scheduled Castes or Scheduled Tribes were most concentrated elected one member either from the Scheduled Castes or the Scheduled Tribes, as the case was, in addition to a member for the unreserved seat. The multi-member seats were devised to implement a provision in the Constitution reserving seats for the Scheduled Castes and the Scheduled Tribes in proportion to their population strength in each State. There were altogether three electoral colleges, consisting of 30 members each, to nominate representatives to the Council of States.

Of the 18,613 candidates who contested the elections, 1,874 were for the House of the People. Fifty-one women stood for election to the House of the People, 216 for the Legislative Assemblies in the States and 15 for the Council of States. Most of the candidates belonged to the 14 all-India parties, including the Indian National Congress, the

Socialist Party, the Jana Sangh, the Hindu Mahasabha, the K.M.P.P. and the Communist Party of India. The rest contested the elections as independent candidates or as members of parties functioning only in individual States.

About 51·15 per cent of the listed voters exercised their franchise, and in one State, Travancore-Cochin, the percentage was as high as 70·8. Belying popular forecasts, the elections aroused much enthusiasm in the rural areas, in many of these places the percentage of polling being higher than in the urban areas. Women exercised their right to vote in very large numbers and, in some cases, they outnumbered men. Hundreds of lame, blind and sick voters, some of whom had to be carried to the polling stations, also participated in the elections.

Despite their colossal magnitude, the elections passed off in a remarkably orderly and peaceful manner. The cost of the elections has been estimated at Rs. 104 million. This works out to less than a rupee per head.

One of the important features of the elections was the return of 115 women, of whom 21 were elected to the House of the People, 14 to the Council of States and the rest to the State Legislatures.

Second General Election

The second General Election began on February 4 and concluded on March 26, 1957*. About 193 million voters, compared with 173 million in the first election, were called upon to elect 494 members to the House of the People and 2,906 representatives to the State Legislative Assemblies. Four political parties—the Indian National Congress Party, the Praja Socialist Party, the Communist Party and the Bhartiya Jana Sangh Party—fought the elections on an all-India basis. Ten other parties put up candidates in various States. The Indian National Congress secured 371 out of 494 seats in the Lok Sabha and 1892 out of 2906 seats in the State Assemblies*. The Praja Socialist Party captured 195 seats in all and the Communist Party 184.

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*Elections to the Lok Sabha for four seats from Himachal Pradesh and two from the Punjab were completed later. The results of the elections for the two Punjab seats were not known when the above figures were compiled.

A significant feature was the election of 27 women to the Lok Sabha and 195 to the State Assemblies. The Bihar Legislative Assembly alone has 32 women members.

CHAPTER VII

DEFENCE

In keeping with India's declared objectives, the role of the Armed Forces is primarily to preserve her territorial integrity and protect her from external aggression.

ORGANIZATION

The Ministry of Defence is responsible for taking or obtaining government decisions on all matters of policy pertaining to the Defence Services and for ensuring their implementation. It obtains the necessary finance for defence expenditure and for its proper allocation among the three branches of the Defence Services. It exercises its executive responsibility through the Armed Forces HQ, which consists of Army, Naval and Air Headquarters. In addition to these, it is more directly responsible for the administration of all inter-service organizations such as the Directorate-General of Ordnance Factories, the Defence Science Organization, the National Cadet Corps, the Military Lands and Cantonments Directorate, the Historical Section and the Armed Forces Information Office. A Defence Production Board has also been constituted to deal with the proper co-ordination of research and development in defence industries.

THE ARMY

The Army figures most prominently among the Armed Forces of India and has a rich fighting tradition. Many of its regiments have earned fame for their fighting qualities and impartial military observers have paid eloquent tribute to the part played by them, particularly during the last two World Wars.

On the attainment of independence, the Army was called upon to serve in numerous emergencies that the country was faced with. It supervised the movement of millions of refugees from both sides of the Indo-Pakistan border. At the same time, consequent to the partition of the country, the Army has had to be reconstituted as a result of the large-scale migration of officers and other ranks who opted for Pakistan as well as the departure of British personnel, who largely filled the officer cadre.

Hardly had these stupendous tasks been completed when India's soldiers and airmen were called upon to drive back raiders from Jammu and Kashmir State. For 15 months Indian troops fought against the invaders, who consisted of both tribal irregulars and units of the Pakistan Army. Indian troops successfuly pushed back the invaders and averted a major calamity in Kashmir.

In the fighting in Kashmir, the Army established a proud record in armoured warfare. Its light tanks negotiated snow-filled, boggy tracks and rugged mountains to Zoji-La at an altitude of 12,000 feet, foiling the plans of the attackers.

THE NAVY

India could hardly claim to have a Navy of her own when independence came; it was then no more than an adjunct to the British Navy. August 14, 1947, found this small force further reduced. Roughly a third of it went to Pakistan, together with three of the most important training establishments. What was left was totally inadequate for the defence of a coastline extending nearly 3,500 miles.

India had, therefore, a great deal of leeway to make up in developing her Navy. Indeed, she had to begin almost from scratch by building up her naval establishments and a fleet. Important among other problems were the modernization of armaments and equipment, improvement of training methods and, above all, the gradual nationalization of the Service.

The Navy has completed the first phase of its expansion programme. The fleet now comprises two cruisers and a number of destroyers, frigates and mine-sweepers. An aircraft carrier is also to be added.

Since independence, it has been the policy of the Government to increase training facilities in India so that self-sufficiency in this respect may be achieved in the minimum possible time. Many new technical schools have sprung up in place of old ones and more are under various stages of completion. All these training centres are being fitted with the latest types of equipment. An Electrical School at Jamnagar and some major technical training schools at Cochin were completed in 1955. As a result of these improvements in training facilities, it is now possible to give practically all the training required in India, except in certain specialized and advanced fields. The need for sending officers and ratings for training abroad has been progressively reduced. Only a very limited number may have to be sent abroad in future to acquire wider experience and keep the Navy in touch with improvements in other countries.

THE AIR FORCE

Like the Army and the Navy, the Air Force was adversely affected by the division of India. The withdrawal of R.A.F. units with their British staff created great difficulties. Also, most of the permanent Air Force stations, situated as they were in the North-west of undivided India, fell to the share of Pakistan. Thus, Partition rent as under the well knit, balanced and operationally proved Air Force which India had built up in the course of 14 long years.

In 1947, Indian airmen were called upon to lend a helping hand to the Army in evacuating refugees from West Pakistan, and they did magnificent work. Not only did they remove thousands to places of safety, but they dropped large quantities of food and other supplies for displaced persons stranded in isolated pockets.

This was immediately followed by the unexpected call in Kashmir. Despite unfavourable flying conditions and the mountainous terrain. the I.A.F. carried out some very difficult tasks. From the besieged town of Poonch alone nearly 35,000 refugees were flown out to safety. While flying to Leh, the Dakota planes had to negotiate heights at 20,000 feet and more.

The Air Force has also carried out a number of "mercy missions" to help people affected by natural calamities. It has carried out air-drop missions in aid of flood-affected people in Assam, West Bengal, Orissa, the Punjab (including former Pepsu) and Delhi. It rushed supplies to Ladakhi villagers cut off by heavy snowfalls. In 1953, a week after a British expedition climbed Mount Everest, the I.A.F. carried out a photographic survey of the Everest massif. The Service has been entrusted with responsible work in various spheres of national reconstruction activities as part of India's Five Year Plan.

The I.A.F. is now 24 years old. Though small in size, it is a compact and balanced force. During its short existence it has created a tradition of daring and skill.

Efforts are being made to modernize the I.A.F., and its squadrons have already been equipped with jet-propelled Vampires assembled in India. A new general reconnaissance unit has been raised, and another has been equipped with four-engined heavy Liberator bombers. Communications units have been formed to provide air travel facilities for national leaders and high officials as well as to meet urgent air-lift requirements. Air courier services, which link all major Air Force stations in India, have been established. A trans-continental service, functioning thrice in two months, plies between India and the U.K. to train air crews in long-distance flying and in transporting equipment.

In the matter of training also the I.A.F. has made rapid strides. There are two Air Force Colleges for imparting flying training—one at Begumpet near Hyderabad and the other at Jodhpur. Both these colleges train pilots for 18 months under an "all-through" flying training scheme. In addition, the Jodhpur college trains navigators and flight signallers. A flying instructors' school, an armament training wing and a paratroopers' school are some of the other important links in the chain of I.A.F. training establishments.

A photographic aerial survey unit was added to the I.A.F. about three years back. The unit has conducted an aerial photographic survey of 22,000 square miles in the Rajasthan desert in connection with oil prospecting. The Air Force has played and continues to play an important part in the development of the North-East Frontier Agency (NEFA) by shouldering the major commitment of maintaining an aerial supply line there.

PEACE MISSIONS

In recent years, India's Defence Forces have been called upon to take up three unusual assignments beyond the country's borders.

The first of these was in Korea. India headed the Neutral Nations Repatriation Commission and despatched a Custodian Force to Korea to implement the terms of reference of the N.N.R.C. After the successful completion of this mission in Korea, India was, within a few months, called upon to head the International Commission for Supervision and Control for Viet-Nam, Laos and Cambodia set up under the cease-fire agreement concluded at Geneva on July 20, 1954. Over 900 officers and other ranks were deputed to Indo-China in September 1954. This assignment continues. More recently, Indian troops were sent to Egypt as part of a U.N. Emergency Force following the withdrawal of British and French forces from the territory they had occupied in the Suez Canal area.

ECONOMIC

CHAPTER I

NATIONAL INCOME

A proper assessment of the national income of a country and its distribution among the various sections of society is essential for any economic planning. Unless it is known how the income of the country is distributed, any proposals for taxation are likely to be arbitrary.

Before independence, no systematic attempt was made in India to estimate the national income of the country. Some rough estimates were, however, published and made available by individual economists. In August 1949, the Government of India for the first time appointed an official committee of experts to prepare a report on the national income and other related statistics.

The First Report of the National Income Committee was released in April 1951, and it was followed by its Final Report in February 1954. The National Income Unit, which had been working under the guidance of this Committee to frame authoritative estimates of National Income, was transferred from the Ministry of Finance to the Central Statistical Organization with effect from June 1, 1954. Since then, the Central Statistical Organization has been publishing an annual paper on national income showing the generating sources and related details.

PRE-PLAN PERIOD

The following table gives statistics regarding the national and per capita incomes of India for the years 1948-49 to 1950-51 (pre-Plan period) at current and constant prices:

	National Income		Per Capita Income	
	At current prices (Rs million)	At 1948-49 prices (Rs million)	At current prices (Rs)	At 1948-49 prices (Rs)
1948-49 . . .	86,500	86,500	246·9	246·9
1949-50 . . .	90,100	88,200	253·9	248·6
1950-51 . . .	95,300	88,500	265·2	246·3

These figures show that although the nominal values of the per capita and national incomes (without taking into account the movement of the price level) showed a rise of 7 per cent and 10 per cent, respectively, between 1948-49 and 1950-51, the real values of these (after taking into account changes in the value of money) remained more or less stationary.

SINCE 1951

With the launching of the first Five Year Plan in April 1951, the first significant upward movement in the national and per capita incomes for several decades started. The national and per capita incomes since 1951-52 at constant prices (without taking into account changes in the price level) and at current prices (after taking into account changes in prices) are given below:

	National Income at current prices (Rs million)	Per Capita Income at current prices (Rs)	National Income at 1948-49 prices (Rs million)	Per Capits Income 1948-49 prices (Rs)
1951-52	99,700	274·0	91,000	250·1
1952-53	98,200	266·4	94,600	256·6
1953-54	104,800	280·7	100,300	268·7
1954-55	96,200	254·4	102,800	271·9
1955-56 (preliminary) .	96,500	252·0	104,200	272·1

It will be seen that, between 1950-51, the pre-Plan year, and 1955-56, the fifth year of the first Plan, the national income of India rose from Rs 95,300 million to Rs 96,500 million, and this in spite of a considerable fall in the general price level between these two dates. Although the nominal value of the per capita income registered a fall between these two dates (from Rs 265·2 to Rs 252·0) after allowing for changes in the price level the per capita income showed a rise of about 10·5 per cent from Rs 246·3 to Rs 272·1 (at 1948-49 prices). The total national income, computed at 1948-49 prices, rose between 1950-51 and 1955-56 by Rs 15,700 million or 17·7 per cent from Rs 88,500 million to Rs 104,200 million. Thus, even after allowing for the considerable increase in population during this period, the per capita income rose by as much as 10·5 per cent within five years.

Taking 1948-49 as the base year, the indices of per capita real income in India at constant prices are shown below:

1950-51	99·8
1951-52	101·3
1952-53	103·9
1953-54	108·8
1954-55	110·1
1955-56	110·2

Net National Product by Industrial Origin

The following table gives the distribution of the national income of India for different years among the main types of activity:—

In Rs 100 million at current prices

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56
	1	2	3	4	5	6	7	8
1. Agriculture	425	449	489	502	481	531	435	422
2. Mining, manufacturing and small enterprises	148	150	153	168	170	177	181	187

	1	2	3	4	5	6	7	8
3. Commerce, transport and communications .	160	166	169	179	178	180	181	185
4. Other services . .	134	138	144	150	154	160	165	171
Total national output at current prices . .	865	901	953	997	982	1048	962	965
Net national output at constant (1948-49) prices . . .	865	882	885	910	946	1003	1028	1042

In terms of index numbers, the national product at current and constant prices works out as follows:—

	At current prices	At constant 1948-49 prices
1948-49	100	100
1949-50	104·2	102
1950-51	110·2	102·3
1951-52	115·3	105·2
1952-53	113·5	109·4
1953-54	121·2	116·0
1954-55	111·2	118·8
1955-56	116·6	120·5

The above figures show that between the years 1948-49 and 1955-56 there has been an increase in the total national income, at constant prices, of about 20·5 per cent. The increase in per capita income over the same period has, however, been less significant, *i.e.*, only about 10·2 per cent.

PERCENTAGE DISTRIBUTION

The following table gives the percentage distribution of the national income for different years among the main types of productive activity:—

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56
Agriculture . .	49·1	49·8	51·3	50·4	49·0	50·7	45·2	43·7
Mining, manufacturing and small enterprises	17·1	16·7	16·1	16·9	17·3	16·9	18·8	19·4
Commerce, transport and communications .	18·5	18·4	17·7	17·9	18·1	17·2	18·8	19·2
Other services . .	15·5	15·3	15·1	15·0	15·7	15·2	17·2	17·7

The above figures show that, in spite of some advance in the share of manufacturing industries and other services in the total national product, agriculture continues to occupy the predominant position. This emphasizes the need for continuing stress on industrialization during subsequent Plan periods.

CHAPTER II

FIVE YEAR PLANS

The dawn of independence found the country face to face with problems of great complexity. The war and Partition had considerably dislocated the economy. There were scarcities of goods, leading to inflation. Against this, freedom had raised the people's expectations for a higher standard of living. Under these circumstances, the Government of India thought of appointing a Planning Commission to formulate a plan for the fullest utilization of the nation's resources in men, money and materials. Planning was envisaged as the means of giving economic content to political freedom.

The Planning Commission was set up in March 1950. Its objective was to initiate "a process of development which will raise living standards and open out to the people new opportunities for a richer and more varied life".

FIRST PLAN

The draft of the first Five Year Plan was published in July 1951 and it was approved by Parliament in December 1952. This Plan aimed at strengthening the economy at the base and imparting to it a measure of strength and stability. It therefore laid stress on agricultural development and multi-purpose projects. The targets of investment and additional production were kept quite modest. It was thought that the first Plan would lend speed to the stagnant economy and prepare the ground for more rapid development in future.

Investment

Originally, a development outlay of Rs 20,690 million in the public sector was envisaged for the first Plan. In 1953-54, however, it was felt that the employment situation in the country was worsening and it should be tackled boldly. The Plan was, therefore, strengthened by the inclusion of some labour-intensive schemes and the target of development outlay in the public sector was raised to Rs 23,560 million. Of this, 16 per cent (Rs 3,720 million) was to be spent on agriculture; 28 per cent (Rs 6,610 million) on irrigation and power; 7 per cent (Rs 1,790 million) on industries and minerals; 25 per cent (Rs 5,560 million) on transport and communications; 23 per cent (Rs 5,470 million) on social services, and 2 per cent (Rs 410 million) on other miscellaneous items.

Achievements

The first Plan completed its course on March 31, 1956. The targets in terms of development outlay were more or less realized in the case of agriculture, irrigation and power and transport and communications. Expenditure was behind schedule in regard to community projects, education and industries in the public sector. On the whole, the target of development outlay fell short only by about 10 per cent over the entire five-year period.

Looking back at the achievements of this period, it is evident that though the gains were small in comparison to the distance that remained to be covered, the rate of progress was heartening.

The over-all result of the first Plan is reflected in an increase of about 18 per cent in the country's national income. In terms of 1952-53 prices, the national income is estimated to have gone up from Rs 91,000 million in 1950-51 to about Rs 104,200 million in 1955-56. The most significant advance was registered in the field of agricultural production. The output of foodgrains increased by 20 per cent, that of cotton by 45 per cent and major oilseeds by 8 per cent. More than 16 million acres were added to the irrigated land. The output of electricity rose from 6,575 million kWh in 1950-51 to 11,000 million kWh in 1955-56. The index number of industrial production showed an advance of 56 points from 105 in 1950 to 161 in 1955.

A number of new projects were started in the public and private sectors. Considerable investment was made in producer and capital goods industries. Prices fell by about 13 per cent by the end of the Plan period. The balance of payments position showed a favourable trend. External accounts were almost in balance in 1954-55, and ended with a small surplus in 1955-56.

Though the above gains are quite impressive, the country is still far from having a reasonable standard of living. There is much unemployment and under-employment and to make matters worse the population is increasing at the rate of about 1·2 per cent each year.

SECOND PLAN

In formulating the second Five Year Plan, these problems were kept to the forefront. The draft of this Plan was published in February 1956 and the final Plan was approved by Parliament in May 1956. The central objectives of the Plan have been defined as follows :

(a) a sizable increase in the national income so as to raise the standard of living in the country;

(b) rapid industrialization, with particular emphasis on the development of basic and heavy industries;

(c) a large expansion of employment opportunities, and

(d) reduction of inequalities in income and wealth and a more even distribution of economic power.

Development Outlay

The total development outlay in the public sector for both the Central and State Governments proposed in the second Plan is Rs. 48,000 million. The distribution of this outlay by major heads of development is as follows:

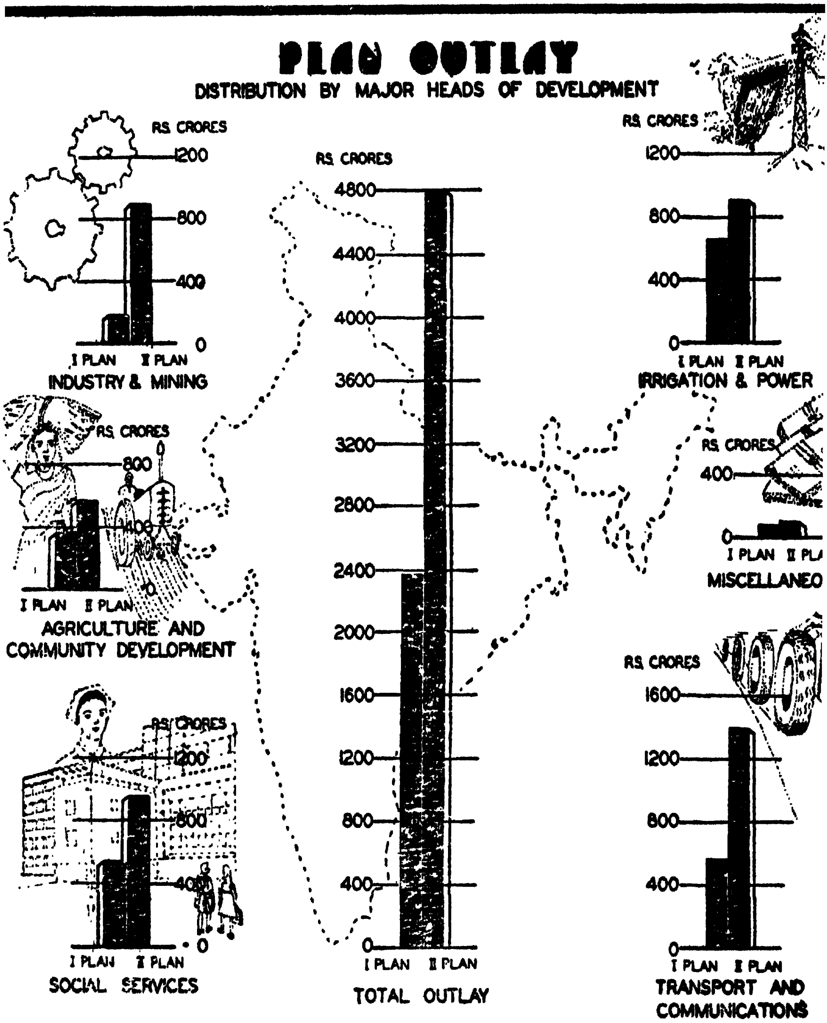
(Rs million)

	First Five Year Plan		Second Five Year Plan	
	Total provision	Per cent	Total provision	Per cent
Agriculture and community development . . .	3,570	15·1	5,680	11·8
Irrigation and power . .	6,610	28·1	9,130	19
Industry and mining . .	1,790	7·6	8,900	18·5
Transport and communications	5,570	23·6	13,850	28·9
Social services . . .	5,330	22·6	9,450	19·7
Miscellaneous . . .	69	3	990	2·1
	23,560	100	48,000	100

It will be seen that there is a considerable shift in emphasis in favour of industries, mining, transport and communications in the second Plan. About half the total expenditure, as compared with about a third in the first Plan, is to be devoted to them. If power is also taken as part of industrial development, the outlay works out to about 56 per cent of the total. In absolute terms the increase in the outlay on industries and mining is about 400 per cent. The outlay on agriculture and community development is about 12 per cent, as against 15 per cent in the first Plan. The proportion of resources allotted to social services and other miscellaneous items is about the same in the two Plans.

Investment

Of the total development programme of Rs 48,000 million in the public sector, about Rs 10,000 million represents current expenditure under such heads as education, health, scientific research, the National Extension Service



PLAN OUTLAY

DISTRIBUTION BY MAJOR HEADS OF DEVELOPMENT and the like. The rest of the expenditure represents net investment, *i.e.*, expenditure on building up productive assets. In addition, about Rs 24,000 million is to be invested in the private sector. Of this amount, Rs 5,750 million will be invested in industry and mining, Rs 1,250 million on plantations, transport and electricity undertakings, Rs. 10,000 million on construction, Rs. 3,000 million in agriculture and Rs 4,000 million in stocks.

Taking the public and private sectors together, the net investment in the economy over the second Plan period will amount to about Rs 62,000 million.

Main Targets

The Plan envisages a significant move forward with regard to basic industries. Three steel plants of about 1 million tons ingot capacity each will be set up. Three more fertilizer factories will be started in the public sector. The production of cement will be raised from the present level of 4·3 million tons to 13 million tons and that of coal from 38 million tons to 60 million tons. The output of railway locomotives will also go up from the present level of 175 to 400 by the end of the Plan.

The target of increase in agriculture was originally fixed at 18 per cent. This has now been raised to 28 per cent. The installed capacity of electricity is expected to increase from 3·4 million kW to 6·9 million kW. The emphasis on the development of social services will be continued. Additional educational opportunities will be provided and medical facilities substantially stepped up.

Financial Resources

It is proposed to meet the expenditure in the public sector of the second Plan as follows:

		(Rs million)
1. Surplus from current revenues . . .		8,000
(*a*) at existing rates of taxation . . .	3,500	
(*b*) additional taxation	4,500	

2. Borrowing from the public		12,000
(*a*) market loans	7,000	
(*b*) additional taxation	5,000	
3. Other budgetary sources		4,000
(*a*) railways' contribution to the development programme	1,500	
(*b*) provident funds and other deposit heads	2,500	
4. Resources to be raised externally . .		8,000
5. Deficit financing		12,000
6. Gap to be covered by additional measures to raise domestic resources		4,000
		48,000

In the meeting of the National Development Council held in December 1956, the target for additional taxation was raised from Rs 4,500 million to Rs 8,500 million. In fact, this target may have to be raised further in view of an upward revision in the outlay on the Plan and reduced emphasis on deficit financing.

Foreign Exchange Resources

The second Plan, with its large investment outlay and stress on the development of basic industries, is likely to involve a deficit in the balance of payments over the five-year period of about Rs 11,000 million. It is proposed to meet part of this deficit by withdrawing Rs 2,000 million out of the accumulated sterling balances, by the expected inflow of private capital of about Rs 1,000 million and the balance of Rs 8,000 million may be met from external aid. Regarding the last item, an unutilized balance of Rs 3,100 million is available from past authorizations.

Employment

The additional employment likely to be generated by the Plan is estimated at 8 million. In addition, full-time work will be available to about 1·6 million persons as a result of the reclamation of land, extension of irrigation facilities, development of plantations and horticulture, etc. Further employment will also be provided by the programmes of development in village and small-scale industries. A complete solution of the problem will, however, have to await further Plans.

Reduction of Inequalities

An important objective of the second Five Year Plan is the establishment of an egalitarian society by demanding greater sacrifices in the task of national reconstruction from people in the higher income groups and by providing more social services and amenities of life to the poorer sections of the community. The Plan seeks to reduce inequalities through fiscal and other devices and at the same time lays emphasis on positive measures for promoting a more even distribution of income.

CHAPTER III

COMMUNITY DEVELOPMENT

The beginnings of the community development programme in India can be traced back to 1946, when experiments in intensive rural development were carried out at Sevagram, at the Sarvodaya centres in Bombay, under the Firka Development Scheme in Madras and in the pilot projects at Etawah and Gorakhpur in Uttar Pradesh. The success of these undertakings encouraged the Planning Commission to draw up a community development programme as an integral part of the first Five Year Plan. A sum of Rs 900 million was provided for the purpose.

OBJECTIVES

The idea behind community development is that all aspects of rural life should be developed simultaneously and that the outlook of the farmers should change so that they may develop confidence, self-help, initiative and the desire to go all out to improve their economic lot themselves. In the past, the Government's efforts to bring about improvements in the rural areas were carried out through the development departments such as Agriculture, Animal Husbandry, Co-operation, Health, Education, etc., all of which worked independently of one another. Outside agencies which worked for the same objective did so more out of philanthropic motives than to create a real psychological change in the villagers or to make them conscious of their latent productive energies. The community development programme seeks to remove these defects. It aims at inculcating in the villagers new desires, new incentives, new techniques and a new confidence so that this vast reservoir of human resources may be used for the growing economic development of the country.

THE PROGRAMME

The main items of the programme are:

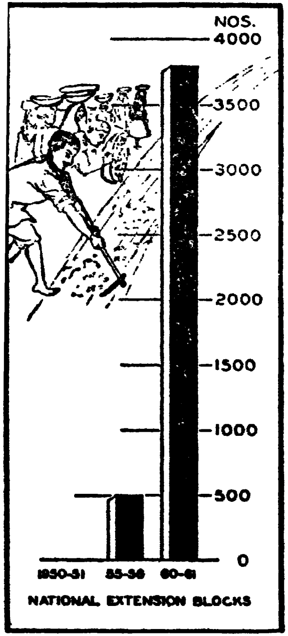
(1) an increase in agricultural output by every possible means;
(2) promotion of indigenous handicrafts and small-scale industries;
(3) improvement of village communications;
(4) extension of facilities for primary education, sanitation and recreation in the villages;
(5) improvement of housing; and
(6) strengthening of local institutions.

The list of projects is formidable both in scope and magnitude. No government agency, however extensive, can implement such a programme on its own. The existing financial resources of the Government are also inadequate to undertake such a difficult task. The ultimate success of the programme, therefore, depends largely on the co-operation of the people, in other words on the contribution in cash or voluntary labour which they can make to bear a portion of the cost of development. The list of priorities, or the projects requiring immediate attention, is also drawn up by the villagers themselves. It has to be understood that the community plan is not a purely official movement. The State provides the administrative set-up and part of the cost of the organization, but in the main the movement is based on self-help and the active interest and support of the people. The role of officials is to guide the people, to advise them regarding technical and other measures for increasing production and to organize the finances, supplies and services needed to enable the people to implement the programmes. In all other matters, initiative rests with the villagers.

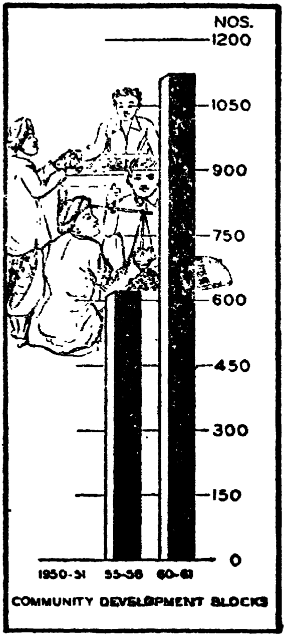
The representatives of the people are associated with the projects at various levels. The panchayats are utilized in the planning as well as the implementation of the programme. The village plans are considered by Advisory Committees at the Block, District and State levels. In all these committees non-official leaders find

COMMUNITY DEVELOPMENT

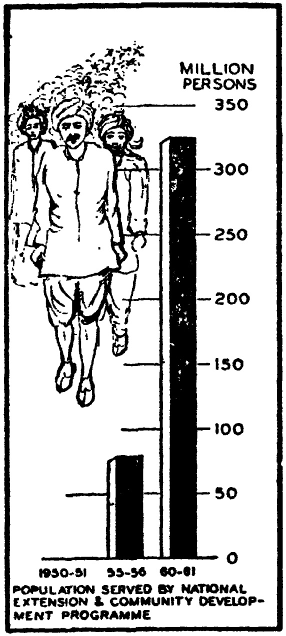
MAIN TARGETS OF DEVELOPMENT



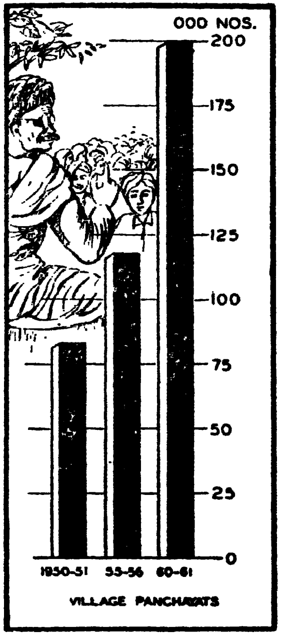
NATIONAL EXTENSION BLOCKS



COMMUNITY DEVELOPMENT BLOCKS



POPULATION SERVED BY NATIONAL EXTENSION & COMMUNITY DEVELOPMENT PROGRAMME



VILLAGE PANCHAYATS

places. In the ultimate analysis, the entire success of the plan depends on the willing co-operation of the people.

PROGRESS

The community development programme was inaugurated in 55 Community Projects on October 2, 1952. Each project area comprised about 300 villages covering an area of 450 to 500 sq. miles with a population of about 200,000. The project area was divided into three development blocks. The villages in each block were grouped into units of five, each group being served by a *gram sevak* (village-level worker).

The reception given to these first 55 projects was so encouraging that the Government decided to extend the experiment to other areas. The country's resources did not, however, permit extension on an intensive scale. A less comprehensive programme under the National Extension Service was, therefore, launched on October 2, 1953. The idea was that, after a period of development, some of these extension blocks could be converted into the more intensively worked community development blocks. The target fixed for the first Five Year Plan was that by the end of March 1956 about one-fourth of the rural population would be served by the programme.

This target has been more or less achieved. At the end of the first Plan period there were 557 community development blocks and 603 national extension service blocks in existence. These covered about 157,000 villages and a population of 88·8 million. Thus, one out of every three villages in India was receiving attention.

It is proposed that by the end of the second Five Year Plan every village in India will be brought under the scheme. About 40 per cent of the area under the programme will be further developed through the more intensive schemes in the Community Projects. In all, 3,800 additional extension service blocks will be set up, 1,120 of these being converted into community project blocks. A provision of Rs 2,000 million has been made in the Plan for the village development programme.

As pointed out earlier, the resources for the Community Projects are drawn both from the people and the Government. For each project area the programme prescribes a qualifying scale of voluntary contribution from the people in the form of money as well as labour. Both the Central and State Governments contribute towards the expenses of the projects. The amount provided for a community development block is about twice the amount provided for a national extension service block.

In its gigantic effort to transform the rural areas, India is receiving much assistance from the U.S.A. and the Ford Foundation. The former supplied equipment and other material of the value of about $7·2 million (Rs 34·2 million) for the 55 projects launched in 1952. Subsequently, the U.S. Government provided a further sum of $5·58 million (Rs 26·6 million) in two instalments. The services of a few experts were also made available for the implementation of the programme. The Ford Foundation has been assisting the programme by providing training to thousands of project workers. It has also provided assistance for launching a few pilot projects for rural development.

ACHIEVEMENTS

The working of the Community Projects and the National Extension Service forms a heartening record of the realization of the objectives envisaged in the Plan. The achievements are many-sided, both psychological and physical. The Prime Minister has described the movement as revolutionary. A recent mission of the United Nations referred to it as "the most significant experiment in economic development and social improvement in Asia at the present time". Many countries have sent observers to study the working of this programme and they have all been greatly impressed by the silent revolution going on in India's villages. The programme has helped change the outlook of the people and infused in them new courage and confidence. In the physical field, also, the achievements have been quite remarkable.

Since the prosperity of the rural areas is largely dependent on agriculture, the programme from the very beginning has given this first priority. Efforts have been made to educate the farmers in the use of improved agricultural implements, better seeds and modern methods of cultivation.

Up to June 1956, 11,094,000 maunds (of 82 lbs. each) of fertilizers and 5,652,000 maunds of improved seeds were distributed under the programme; 1,636,000 demonstrations of better agricultural techniques had been given, and more than 2·5 million acres of additional land brought under irrigation. According to random sample surveys, the average yield of principal crops in the community development areas now exceeds the over-all average yield for the country by 20 to 25 per cent.

In the sphere of animal husbandry, 2,792 "key village" breeding centres were opened for cattle, and 14,000 pedigree animals were supplied; 261,000 birds of superior varieties were supplied to farmers to encourage poultry-keeping.

In the field of road communications, the people's efforts were quite remarkable. Up to the end of June 1956, 41,000 miles of low-grade and 6,647 miles of macadamized roads had been constructed and 31,000 miles of existing roads improved.

The development of medical and health services also gained considerable momentum. In all, 861 primary health centres and 728 maternity and child welfare centres were opened. Under the scheme for the provision of safe water supply, 125,000 wells were constructed or renovated. In addition, 7·4 million yards of drains were constructed.

Educational facilities in the villages were improved by opening 17,000 new schools and converting 7,503 ordinary schools into basic schools. About 47,000 social education centres were also set up and 1,269,000 adults taught to read and write. The number of community recreation centres and libraries rose to 114,000. A very significant achievement was the starting of people's organizations like Youth Clubs, Farmer's Unions, etc. These now number about 90,000.

The people have participated enthusiastically in the implementation of the programme. Till June 1956, the value of the people's contribution to the programme by way of land, cash and labour amounted to about Rs 304 million as against an estimated expenditure of about Rs 515 million by the Government. In other words, the people's contribution was about 59 per cent of the Government's expenditure.

CHAPTER IV

AGRICULTURE

Although India is being steadily industrialized, agriculture is still the mainstay of nearly two-thirds of the population and the primary source of national wealth.

Out of a total area of 811 million acres, some 315 million acres were cultivated in 1954-55. This works out to less than 1·3 acres per head of the agricultural population, though the average size of a holding is about 7·5 acres. Attempts have been made in recent years in almost all the States to effect a progressive consolidation of small, subdivided and scattered holdings. Much, however, remains to be done in this direction.

About 20 per cent of the cultivated area in India possesses irrigation facilities. In 1950-51, the total area under irrigation from all sources was 51·5 million acres. During the first Plan period, about 16·3 million acres were added to this total.

The two outstanding features of agricultural production in India are the wide variety of crops and the preponderance of food over non-food crops. Food crops occupy about 80 per cent of the gross area sown.

There are two well-defined crop seasons, *kharif* and *rabi*. The major *kharif* crops are rice, *jowar*, *bajra*, maize, cotton, sugarcane, sesamum and groundnut. Wheat, barley, gram, linseed, rape and mustard are the major *rabi* crops.

FIRST PLAN

When the first Five Year Plan was launched in 1951-52, India was faced with shortages of food and essential raw materials. The greatest stress was, therefore, laid on agricultural development and multi-purpose river valley projects. About 15 per cent of the proposed outlay was earmarked for agriculture and community development, and another 16 per cent for multi-purpose and irrigation projects. Special stress was laid on raising the production of foodgrains and important commercial crops like sugarcane, oilseeds, cotton and jute. In respect of the last two crops, Partition had completely upset the agricultural situation for, while most of the mills lay in the Indian Union, important cotton and jute-growing areas fell to the new State of Pakistan. The Plan sought to restore this balance. Provision was also made for the improvement of other related spheres such as marketing, fisheries, animal husbandry, soil conservation and forestry. Attention was paid to the adoption of measures which would provide incentives to the cultivators to produce more. For this purpose, reform of the land tenure and tenancy system was planned.

Food Crops

The success achieved under the first Plan has been quite striking. The index number of agricultural production increased from 96 in 1950-51 to 102 in 1952-53. It further rose to 114 in 1953-54 and 116 in 1954-55. It however declined to 114 in 1955-56. The production of foodgrains in 1949-50 was 54 million tons (rice 23·2 million tons, wheat 6·3 million tons, other cereals 16·5 million tons and pulses 8 million tons). The target of food production fixed for the end of the Plan period was 61·6 million tons. In the third year of the Plan itself this target was exceeded by 7·1 million tons. In subsequent years, though production fell slightly it still exceeded the Plan target by 5·0 million tons in 1954-55 and 1·9 million tons in 1955-56.

Commercial Crops

In respect of commercial crops like sugarcane, oilseeds, cotton and jute, the story is equally heartening. In the year 1950-51 the production of these crops was 5·6 million tons, 5·1 million tons, 2·9 million bales and 3·3 million bales, respectively. By 1955-56, the figures had gone up to 5·9 million tons (raw *gur*), 5·5 million tons (oilseeds), 4 million bales (cotton) and 4·1 million bales (jute). Compared to the base year, oilseeds production increased by 8 per cent and cotton by 45 per cent. The output of sugarcane and jute suffered a setback in the initial years of the Plan due to a variety of causes, such as adverse weather conditions and floods (in the case of jute also because of price fluctuations). The ground lost was, however, regained before the first Plan came to a close.

Several factors, natural and human, combined to yield these results. Favourable monsoons was an important factor. The help given by the Union and State Departments of Agriculture, Co-operation, Irrigation and Health was another. The Community Projects and the National Extension Service also proved valuable in creating a new consciousness among the villagers.

Among the programmes undertaken to improve agricultural production were the extension of irrigation facilities, use of fertilizers, manure and improved seeds, reclamation of waste land and general improvement of agricultural practices. A few examples may be cited. The consumption of ammonium sulphate was more than doubled from 275,000 tons before the Plan to 610,000 tons in 1954-55. About 1 million acres were reclaimed by the Central Tractor Organization. In addition, land reclamation and improvement measures were carried out in the States. The total cultivated area increased from 326 million acres before the Plan to 352 million acres in 1954-55. The area under food crops rose from 257 million acres to 292 million acres and that under commercial crops from 49 million acres to about 60 million acres. An area of about 1·6 million acres was brought under the Japanese method of paddy cultivation. Appreciable progress was also made in the improvement of co-operative institutions.

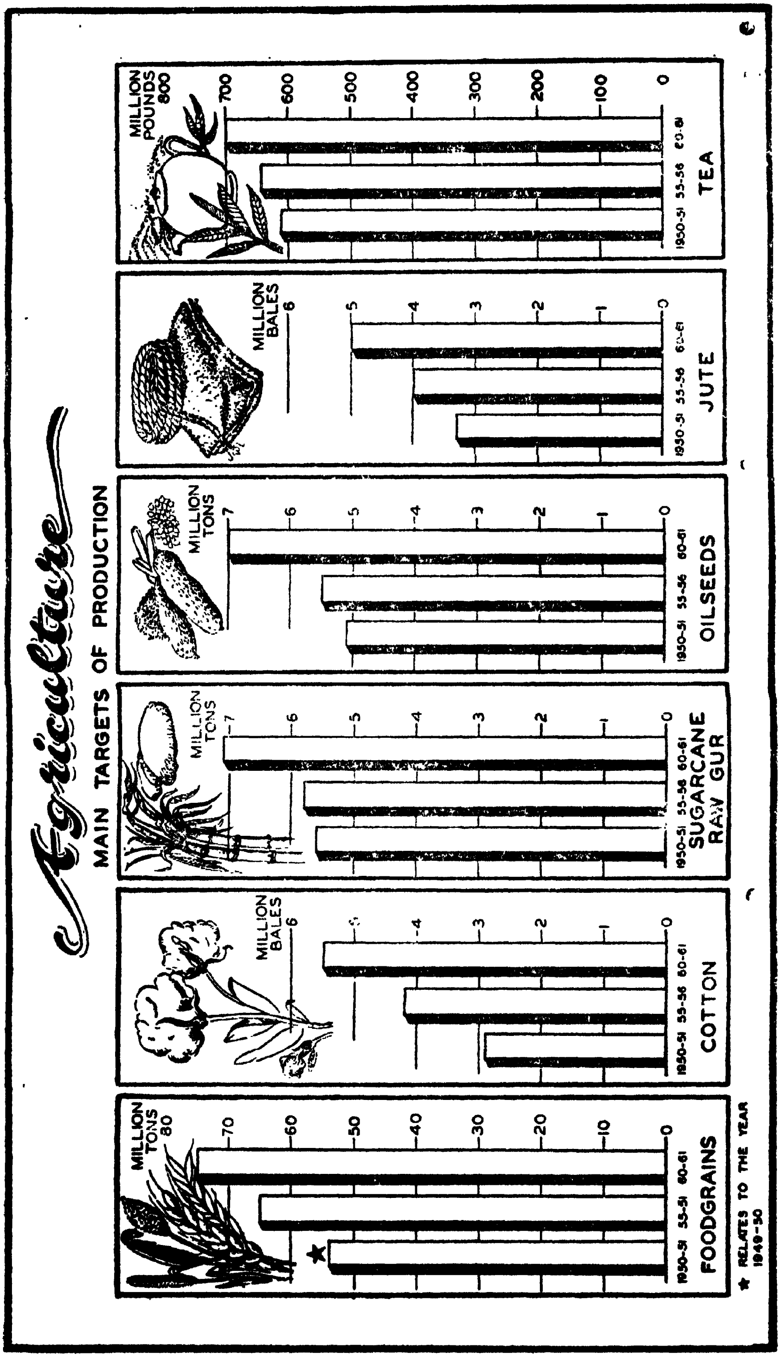
The expansion of agricultural production imparted a measure of strength and stability to the national economy. It made possible a progressive relaxation of controls and checked inflationary processes. Further, it reduced the country's dependence on imports and facilitated the expansion of exports. A substantial saving occurred in foreign exchange. Foodgrain imports came down from 4·7 million tons valued at Rs 2,170 million in 1951 to 0·7 million tons costing Rs 330 million in 1955. Foodgrains are now imported primarily for building up reserves. All these factors paved the way for an accelerated and more balanced development of the economy.

SECOND PLAN

The allocations proposed under major heads for the second Five Year Plan and their comparison with the allotments made in the first Plan are given below:

	First Plan		Second Plan	
	Rs million	Per cent	Rs' million	Per cent
1. Agriculture . . .	1,960	81·7	1,700	49·9
2. Animal husbandry . .	220	9·2	560	16·4
3. Forests and soil conservation	100	4·2	470	13·8
4. Fisheries	40	1.6	120	3.5
5. Co-operation . . .	70	2.9	470	13·8
6. Miscellaneous . .	10	0·4	90	2·6
TOTAL .	2,400	100·0	3,410	100·0

In addition to the allocations indicated above, some provision for agricultural development has also been made under the National Extension and Community Projects programmes. Of the allocation of Rs 2,000 million under this head, Rs 55 million is earmarked for agricultural development. A major portion of this amount will be utilized for minor irrigation works. Besides, a provision of Rs 381 million has been made for major irrigation projects and Rs 1,050 million for flood control and other related projects. The corresponding provisions in the first Plan under these two heads were Rs 384 million and Rs 170 million.


Agriculture
MAIN TARGETS OF PRODUCTION
FOODGRAINS
MILLION TONS
80
70
60
50
40
30
20
10
0
1950-51 55-51 60-61
★ RELATES TO THE YEAR 1949-50
COTTON
MILLION BALES
6
5
4
3
2
1
0
1950-51 55-56 60-61
SUGARCANE RAW GUR
MILLION TONS
7
6
5
4
3
2
1
0
1950-51 55-56 60-61
OILSEEDS
MILLION TONS
7
6
5
4
3
2
1
0
1950-51 55-56 60-61
JUTE
MILLION BALES
6
5
4
3
2
1
0
1950-51 55-56 60-61
TEA
MILLION POUNDS
800
700
600
500
400
300
200
100
0
1950-51 55-56 60-61

The targets proposed for additional production during the second Plan are as follows:

Commodity	Unit	Estimated production in 1955-56 as given in the Plan	Tentative target of production as in the Plan	Revised target of production	Percentage increase in index of production	
					As in the Plan	As revised
Foodgrains .	million tons	65·0	75·0	80·5	16	24·6
Oilseeds .	,,	5·5	7·0	7·6	27	37·0
Sugarcane (*gur*)	,,	5·8	7·1	7·8	22	33·9
Cotton . .	million bales	4·2	5·5	6·5	31	55·6
Jute . .	,,	4·0	5·0	5·5	43	58·1
Other crops	..	..	..	..	9	22·5
All commodities	..	..	..	..	18	27·8

The targets given above represent an overall increase in agricultural production over the 1955-56 figures of about 28 per cent. The original target for additional agricultural production proposed in the Plan was 18 per cent. As a result of the renewed discussions between representatives of the States and Members of the Planning Commission, this target was raised to 28 per cent in November 1956 to meet increased domestic needs, eliminate imports, expand exports and, above all, to provide against the possibility of inflation arising from the heavy investment proposed under the Plan.

The Plan envisages not only an increase in the physical quantities of various agricultural commodities but also an improvement in the quality of these products. In the case of foodgrains, for example, the major portion of the increase is envisaged in superior kinds of rice and wheat. Under cotton, the emphasis is on increasing the production of long-staple varieties. Likewise, in the case of jute, sugarcane, lac, oilseeds and other commodities, measures for the improvement of quality are to be given a high place in the programme of development.

As in the first Plan, the higher production will be achieved largely through improvement in techniques and institutional arrangements for promoting land use and land management on more efficient lines and for ensuring a greater degree of social justice among those dependent on land. Under the existing proposals the irrigated area is proposed to be raised by 21 million acres. The consumption of nitrogenous fertilizers is proposed to be raised from 610,000 tons in 1955 to over 1·8 million tons in 1960-61. Encouragement will also be given to green manuring and to the utilization of sewage, town compost, oil-cakes and other manures. To meet the requirements of improved seed a comprehensive programme for establishing seed multiplication farms has been drawn up. Soil conservation and land development work will be carried out on a more intensive scale. In the institutional sphere, particular attention will be paid to questions relating to the imposition of ceilings on holdings, consolidation of fragmented plots, land management practices and co-operative farming. The problems of marketing, warehousing and rural credit will also receive attention.

It is hoped that by all these methods and by the part to be played by the Community Projects and the National Extension Service in popularizing improved techniques of agricultural production, the targets will be achieved in full measure.

AGRICULTURAL RESEARCH

Research and extension activities play an important part in agricultural production. The programmes of agricultural research in India are co-ordinated by the Indian Council of Agricultural Research. The Council was set up in 1929 on the recommendation of the Royal Commission on Agriculture. It was reorganized in 1951 to enable it to discharge its responsibilities more effectively, especially in the field of extension work. The extension service aims at bridging the gulf between research workers and farmers. Research work is carried on at a number of institutes such as (i) the Indian Agricultural Research Institute, Delhi; (ii) the Central Rice Research Institute, Cuttack; (iii) the

Central Potato Research Institute, Simla; (iv) the Central Vegetable Breeding Station, Kulu; (v) the Forest Research Institute, Dehra Dun; (vi) the Indian Veterinary Research Institute, Izatnagar; (vii) the Indian Dairy Research Institute, Bangalore, and (viii) the Indian Lac Research Institute, Namkum. Besides, there are 22 agricultural colleges which carry on research in specialized fields.

The Indian Central Committees for cotton, jute, oilseeds, sugarcane, coconut, arecanut, lac and tobacco similarly operate and subsidize a number of research schemes at various stations and sub-stations.

The research institutes are engaged on a variety of research projects, both fundamental and applied. They conduct experiments in improving the fertility of the soil and the quality of seeds. They have evolved certain varieties of crops which are capable of resisting drought, disease, insects and pests. The IARI has, for example, evolved the New Pusa-700 wheats, noted for their high yield and resistance to disease. The Sugarcane Research Institute at Coimbatore has evolved the CO 312 and 313 varieties which have increased the sugarcane yield per acre by more than half. Similar results have been obtained in respect of crops like millets, pulses, tubers, vegetables, cotton and jute. The Research Institutes maintained by the Central and State Governments are to be strengthened during the second Plan period. It is proposed to concentrate on problems which link research with development.

FORESTS

The forests of India constitute an important source of national wealth. They yield large quantities of fuel and timber as well as a variety of minor products such as bamboo, commercial grasses, lac, gum, resins, dyes and tans. They also help in the conservation of soil fertility by protecting it from erosion.

Indian forests cover an area of more than 280,000 square miles, that is, about 22 per cent of the total area of the country. Compared with the forest areas in most other countries, this is a low proportion. Therefore, in the Forest Policy Resolution of May 12, 1952, the objective laid down is that India as a whole should aim at maintaining a third of its total area under forests.

In the first Plan stress was laid on plantation work for industries based on wood and for the general improvement of forests. In the second Plan it is proposed to demarcate, rehabilitate and develop about 40 million acres of zamindari forests which now vest in the State Governments. The Plan provides an outlay of Rs 240 million on forests and Rs 200 million on soil conservation, as against a provision of Rs 130 million made under these two heads in the first Plan. The programme includes: (1) the rehabilitation of about 380,000 acres of degraded forests which have come under State control in recent years; (2) plantations along canal banks and roadsides and on village waste lands; (3) plantation of 50,000 acres with commercially important species like teak, 13,000 acres with wattle and blue gum and 2,000 acres with medicinal plants; (4) plantation of 50,000 acres with matchwood; (5) construction or improvement of 7,400 miles of forest roads; (6) establishment of three or four timber treating and seasoning demonstration plants; (7) organization of forest resources surveys and forest research, and (8) increased training of forest personnel.

The programme of forest research includes a number of schemes at the Forest Research Institute, Dehra Dun. A number of forest research stations are planned, the first of which is being set up in the South in two sections at Coimbatore and Bangalore, respectively. A Forestry Commission is also proposed to be set up for the co-ordination of forest development on an all-India basis, for technical advice and guidance to the States in forest management, improvement of forest statistics and undertaking of market studies, etc.

To encourage the habit of planting trees among the people, a *Vana Mahotsava* or tree planting festival has been celebrated in July every year since 1950. During the past seven years more than 200 million trees have been planted.

ANIMAL HUSBANDRY

In a country where cattle provide the main draught power for agricultural operations, the quality of cattle has a direct bearing on the efficiency of agricultural operations. The development of cattle wealth along proper lines is also important for raising the nutritional level of consumption and for providing farmers a supplementary means of gainful employment throughout the year.

Though India possesses 155 million cattle—about a fifth of the word's total population—the quality is poor, owing largely to promiscuous breeding, prevalence of diseases and pests and inadequate nourishment. The average yield of milk per cow per annum is about 413 lbs., as against 4,408 lbs. and 4,802 lbs. in Canada and Australia, respectively. For the same reason the average daily consumption of milk in India is only about 5 oz. per head as against 45 oz. in Australia.

A number of schemes for the improvement of livestock were undertaken in the first Plan period. These included the "key village scheme" for the development of cattle, the establishment of pounds called *gosadans* for the upkeep of old and useless cattle in remote forest grazing areas, a campaign against rinderpest and the opening of more veterinary dispensaries.

The key village scheme aims at establishing throughout the country a number of centres, each consisting of a group of contiguous villages with a population of 2,000 breeding cows (now raised to 5,000), where only controlled breeding is permitted from bulls of known pedigree. All scrub bulls in the area are removed or castrated. The bulls produced in the key village centres are distributed in a planned manner in other areas so that the improvement may spread all over the country. To accelerate progress and make the maximum use of the limited number of approved bulls available, artificial insemination is also being employed. Six hundred key villages and 150 artificial insemination centres were established in the first Plan period. During the second Plan, 1,258 key villages, 245 artificial insemination centres and 254 extension centres with 50 bulls each are to be set up. Twenty-five *gosadans* were established during the first Plan and 60 more are proposed under the second Plan. In addition, 350 cattle farms are to be developed into breeding and milk production units. The mass immunization campaign under the rinderpest eradication scheme has been so phased as to cover the entire country by the end of the second Plan. About 1,900 new veterinary dispensaries are also expected to be established for the treatment of livestock diseases. The Indian Veterinary Research Institute at Izatnagar and the National Dairy Research Institute at Karnal are to be further expanded and strengthened.

To improve the supply of milk, it is proposed to organize 36 urban milk supply schemes, 12 co-operative creameries and seven milk drying plants. Further, to increase the breeding of high milk-yielding animals several pedigree breeding stations are to be set up.

The poultry development programme will further widen the scope for the improvement of nutritional standards. The programme envisages the organization of four regional farms and 300 extension centres. Likewise, for the development of sheep and production of wool 460 extension centres are to be set up during the second Plan period. In all, a total provision of Rs 560 million has been made for animal husbandry, including dairying, under the second Plan.

FISHERIES

With an extensive coast-line and numerous rivers, lakes and tanks, India has potentially rich sources of fish. The present production amounts to about 1·1 million tons. About 70 per cent of this comes from the sea. During the first Plan production increased by 10 per cent. It is planned to develop fishing on a more intensive scale during the next few years. A provision of about Rs 120 million, as against Rs 50 million in the first Plan, has been made for this purpose.

The programme of development includes the survey and charting of fishing grounds, development of fisheries, research and training, supply of fishery requisites and fish seed, improvement of fishing methods, provision of fishing harbours and organization of the transport, storage, marketing and utilization of fish. Attempts will also be made to improve the social and economic conditions of fishermen. It is expected that fish production will increase by about one-third during the second Plan period.

CHAPTER V

IRRIGATION AND POWER

The importance of water and power resources to the predominantly agricultural economy of India cannot be over-emphasized. The prosperity of her peasants and the development of her rural economy depend in large measure on the development of irrigation and the availability of cheap power.

Irrigation has been practised in India since time immemorial. Many ruins of ancient *bunds,* anicuts, small dams and irrigation canals can still be seen in various parts of the country. Only recently, however, have extensive State-managed works been constructed and irrigation facilities extended to vast areas. Although today the total irrigated area in India exceeds that in any other country, it constitutes only about a fifth of the country's cultivated area.

It has been estimated that the quantity of water that flows down the rivers of India each year is nearly 1,456 million acre-feet. Of this, only about 5·6 per cent is utilized at present for irrigation and power generation, and the remainder is allowed to run waste, causing untold damage before it enters the sea.

FIRST PLAN

During the first Plan, efforts were made to conserve and develop India's water resources by drawing up schemes for the integrated development of the river basins. The idea was that the seasonal flow of the rivers, which caused havoc in the countryside during the rainy season, should be dammed so as to provide water for irrigation, power generation, soil conservation, navigation, fish culture and transport development in addition to flood control. An ambitious irrigation and power programme was drawn up for the purpose. A total of 229 irrigation projects were taken up. Of these, 11 big ones, such as the Bhakra-

Nangal, Hirakud and Tungabhadra Projects were multipurpose schemes costing over Rs 100 million each; six, like the Kakrapar and Lower Bhawani, were medium irrigation schemes costing over Rs 50 million each. The remainder were smaller schemes costing between Rs 50 million and Rs 1 million. In addition, a large number of minor irrigation schemes such as the construction of wells, renovation of tanks and improvement works on small streams and rivulets were taken up.

In 1950-51, the total area under irrigation from all sources was 51·5 million acres. This constituted about 16 per cent of the total cultivated area. Additional irrigation amounting to about 16·3 million acres has become available from major, medium and minor irrigation works undertaken during the first Plan period.

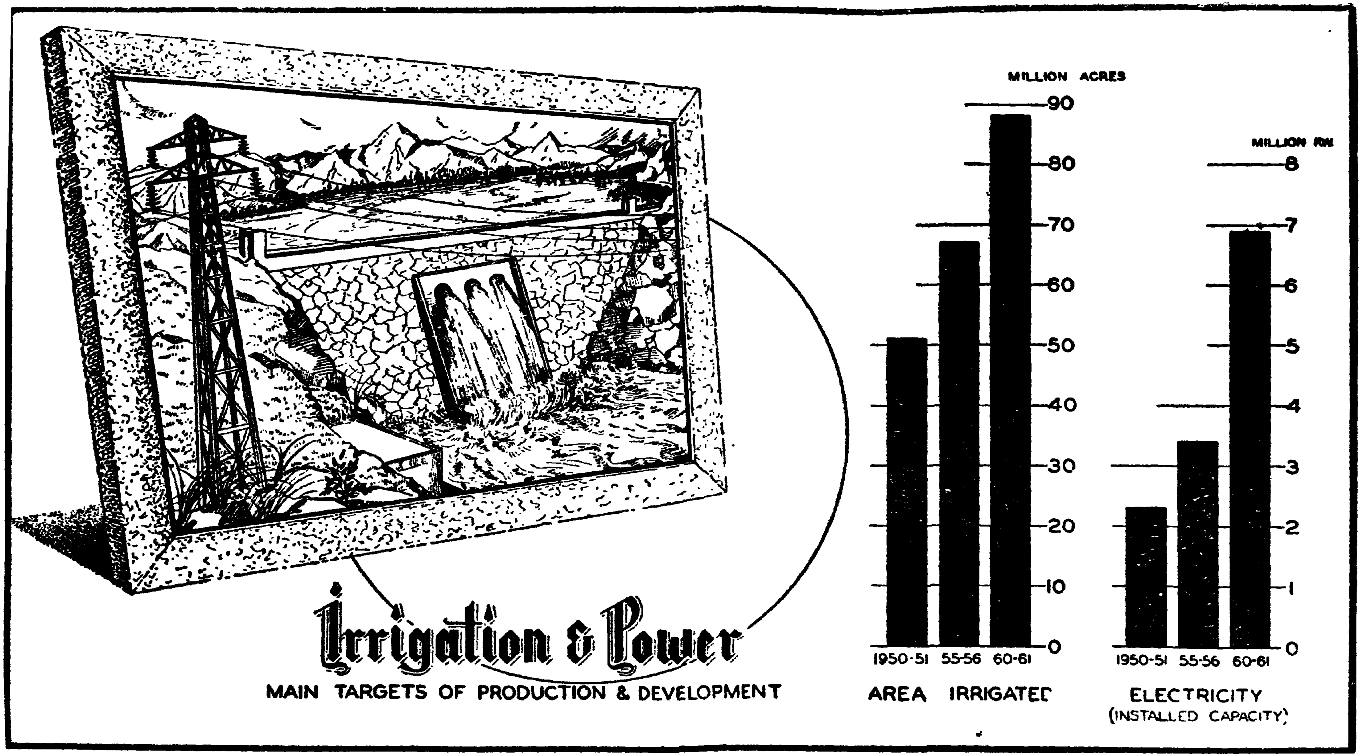
SECOND PLAN

During the second Plan it is proposed to start work on 204 new irrigation projects. This will be in addition to works continuing from the first Plan. Most of these will be medium or small-sized schemes and will, therefore, be able to yield results quickly. It is hoped that, as a result of these schemes and of others undertaken during the first Plan but whose benefits were not felt immediately, about 21 million acres will be added to the irrigated area. This will include about 9 million acres to be irrigated by minor projects. It is estimated that the proportion of the irrigated to the total cultivated area in India will thus increase from about 22 per cent in 1955-56 to about 29 per cent in 1960-61.

The total outlay proposed for irrigation under the second Plan is Rs 3,810 million, as against Rs 3,840 million in the first Plan. In addition, a provision of Rs 200 million has been made for the construction of 3,581 additional tubewells to irrigate 916,000 acres.

SOME MAJOR PROJECTS

Some of the major projects undertaken during the first


Irrigation & Power
MAIN TARGETS OF PRODUCTION & DEVELOPMENT
MILLION ACRES
90
80
70
60
50
40
30
20
10
0
1950-51
55-56
60-61
AREA IRRIGATED
MILLION KW
8
7
6
5
4
3
2
1
0
1950-51
55-56
60-61
ELECTRICITY
(INSTALLED CAPACITY)

Plan, as well as those which are now to be taken up, are as follows:—

Bhakra-Nangal—The construction of this project, which is one of the largest multi-purpose projects in the world, started in 1946. It comprises the Bhakra and Nangal Dams, a vast network of canals, four power-houses and a large number of transmission lines with scores of sub-stations spread over the Punjab, Rajasthan, Himachal Pradesh and Delhi. When completed, the project will irrigate 3·6 million acres of land and generate 594,000 kW of power. The power station on the left flank of the Bhakra Dam is under construction and the entire project is scheduled to be completed by 1960. Already the Nangal Dam, the canal regulator, the Nangal hydel canal and the excavation of the Bhakra canals in the Punjab (excluding the former State of Pepsu) have been completed. The canal system was opened by the Prime Minister on July 8, 1954. The Ganguwal Power House was opened by the President on January 2, 1955. The Kotla Power House was opened by the Union Home Minister in 1956. The excavation of canals in Rajasthan and the Pepsu area is now in progress.

According to present estimates the total cost of the project will be nearly Rs 1,935·5 million.

Damodar Valley—This multi-purpose project is intended to tame the turbulent Damodar river and its tributaries, which overflow their banks and bring destruction to large parts of Bihar and Bengal. It is a joint venture of the West Bengal, Bihar and Central Governments. It will be completed in two phases. The first phase, which began in 1948, comprises (1) four dams at Tilaiya, Konar, Maithon and Panchet Hill, with hydro-electric stations attached to all except the Konar dam, where this has been postponed; (2) a thermal power station at Bokaro with an ultimate power potential of 225 mW; (3) 800 miles of transmission lines and a number of power sub-stations and receiving sub-stations, and (4) an irrigation barrage at Durgapur with 1,550 miles of irrigation and navigation canals and distributaries.

The second phase will include dams at Aiyar, Bokaro and Balpahari and a weir at Bermo for the generation of hydro-power.

The estimated cost of the Damodar project is about Rs 1,028 million. Work on the project was started about eight years ago. The Bokaro power-house (150,000 kW), the Tilaiya (4,000 kW) and Konar dams and the Durgapur barrage have already started functioning.

Hirakud—This project harnesses the river Mahanadi and will eventually provide irrigation to about 1·8 million acres of land. The power-house at the base of the dam will have an initial installed capacity of 123,000 kW. The dam is about 15,000 ft. long with dykes on both sides. It will impound 6·6 million acre-feet of water. The first stage of the project, except the canals, has been completed.

Tungabhadra—This project is a joint undertaking of the Governments of Andhra and Mysore. The dam was inaugurated on July 1, 1953. The reservoir, which has a water-spread of 133 sq. miles, will ultimately store 3 million acre-feet of water. Hydro-electric power will be generated at the dam as well as at the canal falls at Humpi. The total power supply will be 99,000 kW and the area to be irrigated is 820,000 acres.

The main structure of the dam has already been completed. The left side dam power house (18,000 kW) has been built and the right side dam power house (18,000 kW) will be ready in 1958-59. The Humpi power house is virtually complete.

Kosi—The Kosi Project, which will confer a variety of benefits on Nepal and Bihar, is one of the schemes taken up during the later stages of the first Plan. The main purpose of this project is to moderate the damage caused by floods in Bihar State. The scheme to tame the river will cost Rs 460 million. It comprises a barrage three miles above Hanuman Nagar in Nepal, where the Kosi leaves the hills, flood embankments on either side of the river and eastern and western canal systems to irrigate about 1·4 million acres of land.

Work on the main project has not yet started. Construction of the embankments, however, was taken up in January 1955.

POWER

In March 1951, the total installed capacity of the power-generating plants, including industrial installations, was 2·3 million kW. During the first Plan period, 1·1 million kW was added to this. About 3,700 additional towns and villages were electrified during the period, raising their number to 7,400. The per capita consumption of electricity increased from 14 units in 1950-51 to 25 in 1955-56. During the second Plan it is proposed to increase the capacity of electrical undertakings from 3·4 to 6·9 million kW. The additional production will be achieved in both public and private undertakings and through hydro and thermal power plants. The total outlay envisaged in the public sector is Rs 4,270 million and in private companies Rs 420 million.

The electrification programme is expected to cover 18,000 towns and villages by the end of the second Plan. The per capita consumption of electricity, too, will go up to 50 units by 1960-61.

CHAPTER VI

CO-OPERATION

India's declared goal is a socialist pattern of society. Co-operation provides the most potent force for putting this policy into action. It points a middle way steering clear of the abuses of uncontrolled private enterprise and state capitalism. Besides, it inculcates the moral qualities of comradeship, fellow-feeling, mutual confidence and trust which are so essential for building up the national character. Co-operation has been described as the corner-stone of the welfare state in India and is assigned a place of honour in the Five Year Plan.

The co-operative movement in India is about five decades old, the idea having taken concrete shape in 1904, when the first Co-operative Credit Societies' Act was passed. The progress of the movement has, however, been slow due to a variety of reasons. At the end of 1954-55 there were only 219,288 co-operative societies of all types in the country with a total membership of 16 million. An overwhelming percentage of these societies (about 98 per cent) were primary societies, most of which confined themselves to the grant of small advances to agriculturists against personal bonds and sureties. Even then, the total share of these societies in the loan transactions of the cultivators amounted to less than 4 per cent, about 70 per cent of the remaining finance being supplied by money-lenders and village traders. In the sphere of non-credit producer, marketing or consumers' co-operation the position was still worse.

RURAL CREDIT SURVEY

The Reserve Bank undertook a comprehensive survey of the rural credit structure and the state of the co-operative movement early in 1951. Its report was published in December 1954.

The Rural Credit Survey Committee found that the reason for the slow growth of the co-operative movement was that the primary societies received little aid from the central and provincial banks which, in turn, received little support from the Government. It said: "Since there is no alternative to the co-operative form of association in the villages for the proper promotion of agricultural credit and for the success of the Five Year Plans, an integrated scheme of rural credit should be followed. Co-operation must not be allowed to fail and must not be given up. To give co-operation the life and stability it needs the Government must actively associate itself with the co-operative forces in the country. It must associate with the co-operative societies, small or large, at all levels, and assist in bringing about circumstances for an integrated development of co-operation to revitalize the economic activities in rural India."

The broad outlines of the scheme recommended by the Committee were that the State should become a major partner in co-operative institutions at different levels and that there should be greater collaboration between the Government and the Reserve Bank. The share capital of state co-operative banks and land mortgage banks should be expanded on the basis of 51 per cent of the shares being held by the State. A similar partnership through state banks should be provided in the central banks and the large size primary institutions. Whenever necessary, funds for such participation should be provided by long-term loans made by the Reserve Bank to the State Governments out of a National Agricultural Credit Fund, to which the Bank should make an initial allocation of Rs 50 million and thereafter an annual allocation of the same amount. The Committee further recommended that, for the planned development of co-operative marketing and processing on the one hand and warehousing on the other, the State should enter into a similar partnership with co-operative institutions.

The Government of India has largely accepted these recommendations. As a first step, the Reserve Bank of India Act was amended to provide funds to co-operative societies, and a National Agricultural Credit (Long-term Operations) Fund was established with an initial contribution of Rs 100 million. Contributions of Rs 50 million per annum will be made during the period of the Plan, so that by 1960-61 the Fund will have a capital of Rs. 350 million to advance loans to the States, enabling them to subscribe to the share capital of co-operative institutions.

The Imperial Bank of India was nationalized and converted into the State Bank of India on July 1, 1955, with a programme of opening 400 new branches in the rural areas, thereby enabling it and the Reserve Bank to play a more effective part as far as rural credit was concerned.

The Government has also set up a National Co-operative Development and Warehousing Board to act as the institutional agency to plan and promote programmes for the production, processing, marketing, storage, warehousing and import of agricultural produce through co-operative societies and warehousing corporations. This Board will administer two Funds, to be called the Co-operative Development Fund and the Warehousing Fund which, as the names suggest, will go towards building large size non-credit societies and a chain of warehouses all over the country.

PROGRAMME OF EXPANSION

In the second Plan it has been decided to set up 10,400 large size co-operative societies and 1,800 marketing societies all over the country in addition to revitalizing existing ones. In the warehousing sphere it has been decided to set up 350 warehouses and 5,500 godowns through the Central and the State Warehousing Corporations and the marketing and large size societies.

Care has also been taken to strengthen the factors of production and the channels of marketing. One of the important causes of the slow growth of the co-operative movement in India in the past has been that the agriculturist has not been able to obtain credit from the societies without producing sureties or assets of equal value. With the setting up of a chain of warehouses all over the country, and the organization of marketing societies, the farmer will not only be able to secure loans against the value of his produce in the godown but will be able to secure the best price for his crop in the off-season.

It is planned to link the credit and non-credit societies. Warehousing will supply the missing institutional link between these societies. Rural credit societies will be affiliated to the primary marketing societies serving a *mandi* (market). The latter will construct godowns in which the produce of the agriculturists will be stored. Against this security, and also on the basis of anticipated output, loans will be advanced to agriculturists. A target of Rs 2,250 million by way of long, medium and short-term credit has been fixed. The present figure is only Rs 370 million.

In the matter of processing, it is proposed that 35 sugar factories, 48 co-operative cotton-gins and 118 other co-operative processing societies should be set up during the second Plan period. Other forms of co-operatives, such as industrial housing, labour and consumer stores co-operatives have also been recommended.

CHAPTER VII

LAND REFORM

Land is the base of India's economy. Measures of land reform, therefore, play a very important role in agricultural development. The ownership and actual tilling of land are two questions on the replies to which depend the social and economic structure of rural society.

In formulating the first Five Year Plan, the Planning Commision laid down two objectives in relation to its land reform programme—reform of the agrarian structure and an efficient agrarian economy. These two objectives are inter-related. The Planning Commission prescribed the following constituents of this programme:

(1) abolition of all intermediaries between the State and the tillers;

(2) tenancy reform to reduce rents and give tenants an opportunity to acquire permanent rights over the land by payment of fixed compensation, subject to the landlord's right to resume a certain area for his personal cultivation;

(3) fixation of ceilings on holdings;

(4) reorganization of agriculture through consolidation of holdings and prevention of further fragmentation, and the development of co-operative farming with the ultimate ideal of co-operative village management.

ABOLITION OF INTERMEDIARIES

During the first Plan period, much progress was witnessed in almost all the States in relation to the achievement of the first two objectives. Thus, legislation for the abolition of intermediary interests between the State and the tiller has been enacted in all States except a few small pockets. It is, however, at different stages of implementation. Abolition of intermediaries has been generally completed in the States of Andhra, Bihar, Bombay, Madhya

Pradesh, Madras, Punjab, Uttar Pradesh, West Bengal, Jammu and Kashmir, and in the former States of Madhya Bharat, Pepsu, Saurashtra, Ajmer, Bhopal, Delhi, Himachal Pradesh and Vindhya Pradesh. It is, however, only partial in Assam, Orissa, Mysore, Rajasthan and Kerala.

The scheme for the abolition of intermediaries is based on the principle of payment of compensation to the dispossessed intermediaries. Compensation is generally paid in terms of graded multiples of the net income of the intermediaries, the bigger land-owners being allowed a lower multiple and the smaller ones a higher. Where the multiples are at flat rates, graded rates of rehabilitation grants are also payable to the smaller intermediaries. Compensation is paid either in cash or in bonds or partly in cash and partly in bonds. The total compensation payable by the State Governments is estimated at about Rs. 4,500 million, of which the two States of Uttar Pradesh and Bihar account for nearly 70 per cent.

TENANCY REFORM

It was recommended in the first Plan that the maximum rent payable by tenants should generally be one-fourth or one-fifth of the produce. Considerable progress has been made in this respect and rents reduced to one-fourth of the produce or less in Assam, Bombay, Madhya Pradesh (the Berar area), Orissa, U.P., Andhra (Hyderabad area), Mysore (Malnad area), Rajasthan, and the former States of Ajmer, Delhi, Himachal Pradesh, Kutch, Vindhya Pradesh and Madhya Bharat in respect of future leases. Much still remains to be done in the other States in this respect. Rents in Andhra, Madras, Madhya Pradesh (excluding Berar), West Bengal, and the former States of Madhya Bharat, Bhopal, Travancore-Cochin (now Kerala), Coorg, Manipur and Tripura are either unregulated or exceed one-third of the produce. These will have to be reduced considerably in order to bring them into line with the level of rents suggested in the first Plan. In Bihar, Punjab (including Pepsu), Mysore (some areas) and the Kutch area of Bombay the maximum rent is one-third of the produce which, compared with the recommendations in the first Five Year Plan, is also high.

SECURITY OF TENURE

The position regarding the rights of tenants and sub-tenants is as follows:

In Uttar Pradesh and Delhi security of tenure has been conferred on all tenants and sub-tenants with the exception of those who hold land from persons suffering from a disability. All sub-tenants have been brought into a direct relationship with the State.

Tenants can either retain a portion of their holdings or are entitled to the allotment of a minimum holding in the States of Bombay, Punjab (including Pepsu), Rajasthan and in Himachal Pradesh.

In Assam, Orissa, Madhya Pradesh (Berar), West Bengal, Jammu and Kashmir, Andhra (Hyderabad) and the Kutch area a limit has been imposed on the amount of land which a landlord can resume from a tenant, but no provision has been made so far for a minimum holding for each tenant.

In Madhya Pradesh (other than Berar) tenants get occupancy rights in habitually let lands (lands let out for three years in a period of five years) and in the Ajmer area tenants have generally been given security.

In Ajmer, in the intermediary areas all tenants and sub-tenants in possession of land for three years or more have been declared owners without payment of compensation. In the Khalsa area a tenant can get, immediately on demand, permanent and heritable rights and also an option of acquisition of ownership on payment of compensation.

In Bihar, a distinction is made between tenants who hold land on written leases and others who hold land on oral leases. In the former case occupancy rights accrue if a tenant is in possession of the land for 12 years or more. If he holds it for less than 12 years, he is liable to ejectment on the expiry of the term of lease. Tenants in the latter category cannot be ejected except on grounds of nonpayment of rent. Provision has also been made for the restoration of tenants ejected since February 1953.

In the Saurashtra area of Bombay, the problem has been mainly one of tenants of intermediaries. Such tenants have been made full owners. In the peasant proprietor areas there are very few tenants. Sub-letting has been prohibited except by persons suffering from a disability.

The ejectment of tenants and sub-tenants has been stayed, or a minimum period of tenure prescribed, in the States of Andhra, Madras, Mysore, Kerala, the former Madhya Bharat, Bhopal and Vindhya Pradesh States and Manipur.

CEILINGS ON HOLDINGS

The Planning Commission recommended that the States should work out detailed plans for fixing ceilings on holdings, keeping in view the agrarian problems in their respective areas. Legislation in this respect has been enacted in Punjab, West Bengal, Jammu and Kashmir, the former Hyderabad and Pepsu States and Assam. A number of States have imposed limits on the future acquisition of holdings. These are Bombay (12 to 48 acres), U.P. (30 acres), and the former States of Delhi (30 acres), Madhya Bharat (50 acres) and Saurashtra (three times the economic holding).

During the second Plan period measures have also been proposed for preventing further sub-division and fragmentation of holdings and for the consolidation of existing ones.

BHOODAN MOVEMENT

The Bhoodan Movement conceived by Acharya Vinoba Bhave early in 1951 is an important step in the direction of land reform. Describing the aims of the movement, Acharya Vinoba Bhave says: "In a just and equitable order of society, land must belong to all. That is why we do not beg for gifts but demand a share to which the poor are rightly entitled." The main objective is to propagate the right thought by which social and economic maladjustments can be corrected without serious conflicts. That is why Acharya Bhave describes the movement as a kind of *satyagraha* or peaceful revolution.

From a small beginning in 1951, the Bhoodan Movement has now extended over the length and breadth of India. Collections of gifts till the end of September 1956 totalled 4·14 million acres. The total number of donors was about 560,000. The ultimate aim of the land gift movement is that all landless families in India, whose number is estimated at 10 million, should be enabled to secure at least 5·3 acres of land each. Already the movement has created a great revolution in the minds of the people and the forces released by it are likely to go a long way in winning the people's whole-hearted support for the Government's land reform measures.

CHAPTER VIII

INDUSTRY

Long before the Industrial Revolution in the West, India was known as the workshop of the world. She was also the hub of the world's commerce. In addition to rice, wheat, sugar and raw cotton, she exported cloth, silk and luxury goods. Indian silk and cotton textiles, metal-ware and wood and ivory carvings, famous throughout the world, were the handiwork of highly skilled craftsmen. Indian calicos, silks, muslins and chintzes were in great demand in every part of the civilized world.

With the ascendency of the British in India, however, various restrictions were imposed. Certain cotton fabrics of Indian origin were denied entry into the British market by law, and even at home their manufacture was discouraged. Consequently, these industries suffered a rapid decay. As a result of large-scale imports of British manufacturing goods, Indian artisans were thrown out of employment and India progressively became an agricultural outpost of the industrial economy of Britain.

The years 1850-55 marked a fresh beginning, when a few cotton and jute mills and coal-mines were started with Indian capital. The spell of stagnancy was broken, and in seven decades these industries made phenomenal progress. Meanwhile, industries like paper, leather, ginning and spinning were established. In 1908, a modern iron and steel industry came into existence. The first World War and the policy of discriminating protection, which was adopted in 1922, did much to help the growth of Indian industries. Between 1922 and 1939, the production of cotton piece-goods was more than doubled, that of steel ingots increased eight times and paper two and a half times. The sugar industry made such rapid progress that the country became self-sufficient in sugar. The cement industry had also begun to develop, and by 1935-36 it was able to meet about 95 per cent of the total needs of the country.

World War II created favourable conditions for the maximum utilization of the existing capacity of Indian industries. The production of cotton piece-goods, paper, sugar, steel, tea, cement, chemicals, metallurgical goods, drugs, leather manufactures, ammunition, machine tools, lathes and engineering stores increased significantly. Several new industries came into existence. For instance, India started producing ferro-alloys, non-ferrous metals, diesel engines, pumps, bicycles, sewing machines, soda ash, caustic soda, chlorine and super-phosphates. The manufacture of machine tools, simple machinery, cutlery and pharmaceuticals also began and, for the first time, the repair of aircraft and ships was undertaken in the country.

Thus, at the end of the war, India ranked among the first eight industrial nations in the world. The paid-up capital of the joint stock companies was Rs 4242 million and the number of workers employed in the factories was more than 2·5 million. The output of steel and cotton textiles satisfied three-quarters of the internal demand. The country was, moreover, self-sufficient in sugar, cement and soap. In jute manufactures she enjoyed a virtual world monopoly.

The period immediately following the war was a critical one for India's industries. The bulk of the country's industrial equipment, heavily overworked during the war, had become obsolete. In view of an anticipated depression, the capital market was slack. Production fell and the output in most industries was far below capacity. Furthermore, for a country of this size, there were too few producer goods industries and the location of industries was also unscientific. Raw materials were in short supply and there was a steady rise in production costs. The rise in personal income was more than offset by the increased cost of living, and so an inflationary situation set in with all the attendant hardships, labour unrest and middle class impoverishment.

The partition of the country in 1947 destroyed its economic unity and threw certain industries out of gear.

For instance, the jute mills in and around Calcutta and the jute-growing areas in East Pakistan were cut off from each other. Similarly, the textile mills of Bombay and Ahmedabad became dependent on imports amounting to 1 million bales of raw cotton.

POST-FREEDOM PHASE

Prompt remedial measures became necessary. In December 1947, the Government of India convened a tripartite conference on industrial development to which representatives of labour and capital were invited. The position of Indian industry was reviewed and the objectives of government planning defined. The immediate aim of the Government was to increase production through more intensive exploitation of the existing resources and to improve the standard of management, whereas the long-term objective was to raise production to the full extent of existing capacity. At the conference, the representatives of employers, workers and the Government agreed on a three-year industrial truce in the national interest.

INDUSTRIAL POLICY

In 1948, the Government announced its industrial policy. This envisaged a mixed economy, with over-all responsibility of the Government for the planned development of industries and their regulation in the national interest. While it reiterated the right of the State to acquire any industrial undertaking in the public interest, it reserved an appropriate sphere for private enterprise.

Industries were classified under three heads. The first category included arms and ammunition, atomic energy and the ownership and management of railway transport, which were declared to be the exclusive monopoly of the Central Government. The second included coal, iron and steel, aircraft, shipbuilding, telephones, telegraphs, wireless and mineral oils, in respect of which the State was to be exclusively responsible for the establishment of new undertakings. The existing undertakings in these industries were, however, to continue for a period of ten years, after which the position was to be reviewed. The third category comprised the rest of the industrial field, which was left open to private enterprise.

Consistent with its responsibility for direction of industrial policy, the Government decided to acquire powers to regulate and develop the industrial field and intervene in the private sector in order to ensure satisfactory progress and proper standards of management. To this end, the Constitution was amended and the Industries (Development and Regulation) Act, 1951, was enacted.

Under the Act, all existing or new undertakings were to be registered or licensed. The Government was authorized to examine the working of any scheduled industry or industrial undertaking and to issue such directions as it considered necessary. If the undertaking continued to be mismanaged, the Government was empowered to take over its management or control. The Act also envisaged the establishment of a Central Advisory Council consisting of representatives of industry, labour, consumers and primary producers to advise the Government on all matters concerning the development and regulation of industries. At the same time, it provided for the setting up of Development Councils for individual industries or groups of industries.

By the judicious use of these powers, the Government has been able to secure (1) the proper utilization of the country's resources, (2) a balanced development of large-scale and small-scale industries, and (3) a proper regional distribution of the various industries.

Up to the end of February 1955, 3071 industrial undertakings were registered in the country. Forty-two industries were placed within the scope of the Industries Act and ten Development Councils were set up for the following industries: (1) heavy chemicals (acids and fertilizers), (2) internal combustion engines and power-driven pumps, (3) bicycles, (4) sugar, (5) light electrical industries, (6) heavy electrical industries, (7) pharmaceuticals and drugs, (8) heavy chemicals (alkalis), (9) woollen textiles and (10) art silk textiles. In addition to these Councils, a number of panels of experts were appointed to study the problems of various industries.

For the development of important industries for which sufficient capital was not available in the private sector, the Government gave financial assistance either by granting loans on special terms or participating in equity capital. Industries which received such assistance included the manufacture of explosives for civil purposes, intermediates for certain types of dyestuffs, textile machinery and steel.

The establishment of the Industrial Finance Corporation in July 1948, the National Industrial Development Corporation in October 1954 and 11 State Finance Corporations have contributed greatly towards the speedy development of industries. The Industrial Finance Corporation has afforded financial assistance in the form of advances and long-term loans to industrial concerns. The State Finance Corporations have assisted medium and small-scale industries which do not fall within the scope of the All-India Corporation. Subject to the approval of the Government, the National Industrial Development Corporation formulates projects for the establishment of new industries and the development of new lines of production in the private sector. It also acts as an agency of the Government for the grant of special loans for the rehabilitation of the cotton textile and jute industries. The Corporation is a private limited company with an authorized capital of Rs 10 million, of which the Government's share amounts to Rs 1 million.

The Government has also assisted the private sector by facilitating the import of essential raw material and basic intermediates, offering tax concessions and protecting young industries. The statutory Tariff Commission, established in January 1952 in place of the previous non-statutory Tariff Board, has been reviewing the progress of protected industries and examining new schemes for protection.

Efforts have been made to secure technical help from industrially advanced countries for the development of Indian industries either under international technical assistance schemes or through direct negotiations.

FOREIGN CAPITAL

In order to supplement capital resources for rapid industrial development, the Government has invited foreign assistance in cases where sufficient capacity for the manufacture of a particular item does not exist in the country and where it is considered desirable to secure the know-how from leading foreign firms. The policy in regard to foreign capital was enunciated in the Industrial Policy Resolution of April 1948 and in the Prime Minister's statement in the Constituent Assembly in 1949, which laid down that:

(1) the participation of foreign capital and enterprise should be carefully regulated in the national interest, for example, by ensuring that the major interest in ownership and effective control should, save in exceptional cases, be in Indian hands and that the training of suitable Indian personnel for the purpose of eventually replacing foreign experts will be insisted upon in all such cases;

(2) there will be no discrimination between foreign and Indian undertakings in the application of a general industrial policy:

(3) reasonable facilities will be given for the remittance of profits and repatriation of capital consistent with the foreign exchange position of the country;

(4) in the event of nationalization, fair and equitable compensation will be paid.

Investment of foreign capital in purely financial, commercial or trading concerns is generally not permitted except where technical 'know-how' is an essential aspect of the trading activities.

Foreign collaboration in industry is also permitted on payment of a royalty or technical fee to the non-residents and approval in such cases is given if the rate of royalty is reasonable in relation to the benefits that are expected to accrue.

hydraulic and steam turbines; (7) coal and lignite; (8) mineral oils; (9) mining of iron ore, manganese ore, chrome ore, gypsum, sulphur, gold and diamonds; (10) mining and processing of copper, lead, zinc, tin, molybdenum and wolfram; (11) minerals specified in the Schedule to the Atomic Energy (Control of Production and Use) Order, 1953; (12) aircraft; (13) air transport; (14) railway transport; (15) shipbuilding; (16) telephones and telephone cables, telegraph and wireless apparatus (excluding radio receiving sets), and (17) generation and distribution of electricity.

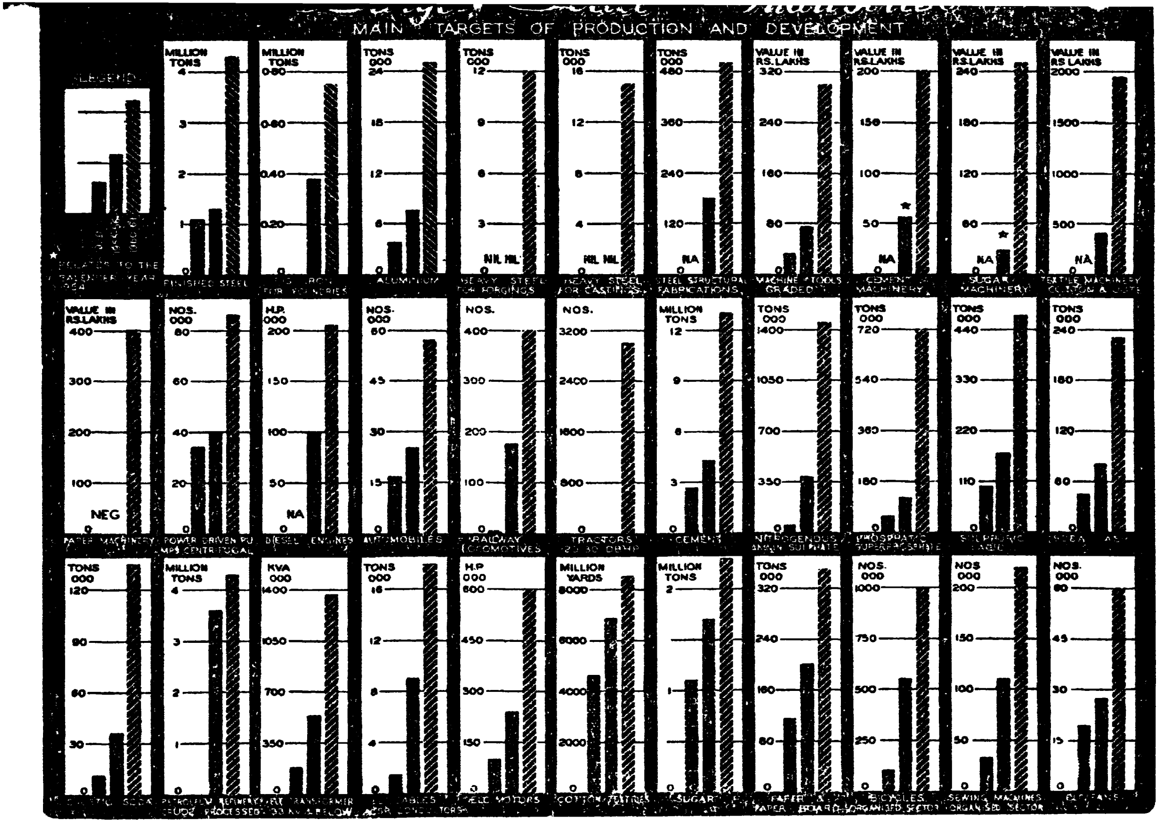
Schedule B contains 12 industries which are to be progressively owned by the State. They are: (1) all other minerals except "minor minerals" as defined in Section 3 of the Minerals Concession Rules, 1949; (2) aluminium and other non-ferrous metals not included in Schedule 'A'; (3) machine tools; (4) ferro-alloys and tool steels; (5) basic and intermediate products required by chemical industries, such as for the manufacture of drugs, dyestuffs and plastics; (6) antibiotics and other essential drugs; (7) fertilizers; (8) synthetic rubber; (9) carbonization of coal; (10) chemical pulp; (11) road transport, and (12) sea transport. In this sector the State will gradually enlarge its operations, but private enterprise will supplement the efforts of the State either of its own accord or with State participation.

The development of industries in the rest of the field has been left to the initiative and enterprise of the private sector, although it is open to the State to enter any field if necessary. These categories are not intended to be rigid and a great deal of dovetailing is envisaged.

The new industrial policy also reiterates the importance of cottage and small industries and stresses that these must be assisted and encouraged to play an increasing part in the national economy.

SECOND FIVE YEAR PLAN

Industries which are to form the spearhead of economic progress account for about a fifth of the total expenditure


MAIN TARGETS OF PRODUCTION AND DEVELOPMENT
LEGEND
1955-56
1960-61
★ RELATES TO THE CALENDER YEAR 1954
MILLION TONS 4 3 2 1 0
FINISHED STEEL
MILLION TONS 0·80 0·60 0·40 0·20 0
PIG IRON FOR FOUNDRIES
TONS 000 24 18 12 6 0
ALUMINIUM
TONS 000 12 9 6 3 0
NIL NIL
HEAVY STEEL FOR FORGINGS
TONS 000 16 12 8 4 0
NIL NIL
HEAVY STEEL FOR CASTINGS
TONS 000 480 360 240 120 0
NA
STEEL STRUCTURAL FABRICATIONS
VALUE IN RS. LAKHS 320 240 160 80 0
MACHINE TOOLS (GRADED)
VALUE IN RS. LAKHS 200 150 100 50 0
NA ★
CEMENT MACHINERY
VALUE IN RS. LAKHS 240 180 120 60 0
NA ★
SUGAR MACHINERY
VALUE IN RS. LAKHS 2000 1500 1000 500 0
NA
TEXTILE MACHINERY COTTON & JUTE
VALUE IN RS. LAKHS 400 300 200 100 0
NEG
PAPER MACHINERY
NOS. 000 80 60 40 20 0
POWER DRIVEN PUMPS CENTRIFUGAL
H.P. 000 200 150 100 50 0
NA
DIESEL ENGINES
NOS. 000 60 45 30 15 0
AUTOMOBILES
NOS. 400 300 200 100 0
RAILWAY LOCOMOTIVES
NOS. 3200 2400 1600 800 0
TRACTORS (20-30 DBHP)
MILLION TONS 12 9 6 3 0
CEMENT
TONS 000 1400 1050 700 350 0
NITROGENOUS (AMMONIUM SULPHATE)
TONS 000 720 540 360 180 0
PHOSPHATIC (SUPERPHOSPHATE)
TONS 000 440 330 220 110 0
SULPHURIC ACID
TONS 000 240 180 120 60 0
SODA ASH
TONS 000 120 90 60 30 0
CAUSTIC SODA
MILLION TONS 4 3 2 1 0
PETROLEUM REFINERIES (CRUDE PROCESSED)
KVA 000 1400 1050 700 350 0
ELE. TRANSFORMER (33 KV & BELOW)
TONS 000 16 12 8 4 0
ELE. CABLES (ACSR CONDUCTORS)
H.P. 000 600 450 300 150 0
ELEC. MOTORS
MILLION YARDS 8000 6000 4000 2000 0
COTTON TEXTILES
MILLION TONS 2 1 0
SUGAR
TONS 000 320 240 160 80 0
PAPER & PAPER BOARD
NOS. 000 1000 750 500 250 0
BICYCLES ORGANISED SECTOR
NOS 000 200 150 100 50 0
SEWING MACHINES ORGANISED SECTOR
NOS. 000 60 45 30 15 0
ELEC. FANS

in the public sector of the second Five Year Plan. An allocation of Rs 8,900 million is made for industries and mining in the second Plan as against Rs 1,790 million in the first Plan. The large increase in the outlay, which amounts to nearly 400 per cent, indicates the quantum and pace of industrial progress envisaged in the next few years. Practically the whole amount on large-scale industries and mining is for the development of basic industries such as iron and steel, coal, fertilizers and heavy engineering and electrical equipment.

In the private sector, the development programmes of the National Industrial Development Corporation as well as those of mining, electric power generation and distribution and plantation and small-scale industries will involve an outlay of Rs 7,200 million.

Broadly speaking, the capital and producer goods sector will be expanded and its production will increase in the second Plan. It is estimated that by the end of the second Plan period the index of industrial production (base 1951=100) will rise to 194 from 130 in 1955-56. The index for producer goods, which stood at 132 in 1955-56, will increase by 73 per cent, while that for factory-produced consumer goods will register a rise of 18 per cent.

Steps will be taken to achieve better standardization of industrial products and an increased supply of raw materials and to arrange a balanced distribution of the new projects in the different regions of the country. Certain basic industries like iron and steel, coal, lignite, aluminium and petroleum are produced in relatively backward regions, thus securing a wider and more equitable distribution of the benefits of industrialization.

IMPORTANT PROJECTS AND INDUSTRIES

The following are some important projects and industries in the country:

Fertilizer Factories

The Sindri fertilizer factory, built at a cost of Rs 230 million, is the largest of its kind in Asia. Managed by a private company known as Sindri Fertilizers and Chemicals, it went into production in October 1951. In 1955, it produced 321,364 tons of ammonium sulphate, exceeding the target for the year. The coke-oven plant, which went into production in September 1954, has reached its full rated capacity of 600 tons per day, enabling Sindri to be self-sufficient in coke.

Other factories are being set up under the second Plan to meet the country's growing requirements of fertilizers. Good progress has been made in regard to the establishment of a fertilizer-cum-heavy water factory at Nangal in the Punjab. This factory, which will go into production by the end of 1959-60, will have an installed capacity of 200,000 tons of ammonium nitrate. It will produce 70,000 tons of fixed nitrogen by the end of the second Plan.

Another fertilizer plant is to be set up at Neyveli in Madras as part of the South Arcot lignite project. It will produce 200,000 tons of ammonium sulphate and 46,000 tons of urea annually to meet the demand for fertilizers in South India. A third new factory will be established at Rourkela, utilizing the gases from the steel plant. This will have a production capacity of approximately 80,000 tons of nitrogen per annum. These factories are expected to meet the country's full demand for fertilizers by the end of the second Plan period.

Cable Factory

A factory to manufacture insulated telephone cables was set up, with technical assistance from a British firm, at Rupnarainpur in West Bengal during the first Plan period. The factory, which went into production in 1954, was originally designed to produce about 470 miles of cables valued at nearly Rs 10 million annually. In view of the increased requirements of the Posts and Telegraphs Department, it has been decided to double its capacity.

During the second Plan, it is proposed to link the major cities by an underground cable network. To this end, the factory will also manufacture about 300 miles of coaxial trunk cables every year.

Telephone Factory

The construction of a factory at Bangalore to manufacture telephone equipment commenced in 1948. The first Five Year Plan allocated a sum of Rs 13 million for this factory, but the amount was later raised to Rs 24·9 million. Up to the end of 1955-56, about Rs 29·1 million was spent and the capacity of the factory reached 35,000 exchange lines and 50,000 telephone instruments per annum. Starting with purely assembly work, it is now able to manufacture almost all components of a telephone.

During the second Plan, the production capacity will be raised to 40,000 exchange lines and 60,000 telephones.

Machine Tool Factory

Under an agreement with a Swiss firm, a factory for the manufacture of precision machine tools has been built at Jalahalli near Bangalore. The first stage of production of components of 8½-inch centre high-speed lathes began in October 1954. Production increased in 1955. The development programme, which is estimated to cost about Rs 20 million, includes the production of 400 high-speed lathes of 8½-inch centre. The factory will also produce milling and drilling machines.

Machine Tool Prototype Factory

The Machine Tool Prototype Factory at Ambarnath in Bombay State, which was completed in 1953 at a total cost of Rs 49·5 million, produces specialized machine tools of the types mainly required by the ordnance factories. The original programme was for Rs 5·5 million of total production by the end of 1956-57.

Vishakhapatnam Shipyard

Since the Government acquired a controlling interest in 1952, the Vishakhapatnam shipyard has undertaken the construction of modern 'Maierform' design ships propelled by diesel engines as distinct from the old "Jala" type vessels built by the Scindia company, the former owners. So far it has built 16 ships of various types and sizes. The production capacity of the yard is now four ships of the modern design per annum, roughly equivalent to six ships of the older type. A dry dock is to be constructed here at a cost of Rs 21·5 million.

The shipbuilding programme for the second Plan also includes preparatory work in connection with the establishment of a second shipyard. In addition, there is a proposal to manufacture heavy marine diesel engines.

DDT Factories

The DDT factory at Delhi, set up with the help of UNICEF and the U.N. Technical Assistance Administration, commenced production in March 1955. It is producing about 2 tons per day.

Under the second Plan, the plant is to be doubled in size by the end of 1957. It has also been decided to set up another DDT plant of similar capacity at Alwaye in Kerala. This factory is likely to begin production by December 1958.

With the production of about 2,000 tons of benzene-hexachloride in the private sector, India's requirements of about 5,000 tons of insecticide per annum for the campaign against malaria will be fully met from indigenous production at the end of the second Plan period.

Penicillin Factory

The penicillin factory at Pimpri, near Poona, was constructed during the first Plan with the help of UNICEF and WHO. A plant for an output of 9 million mega units of the drug per year started regular production in August 1955, and by November that year reached its full installed capacity. It is proposed to expand the capacity of the plant by 60 per cent during the second Plan. This work, which has already started, is expected to be completed within two years. Arrangements are also being made to manufacture bicillin—an improved form of penicillin—and streptomycin as part of the programme.

National Instruments Factory

Founded in 1830 for the maintenance and repair of precision instruments, this factory (formerly called the Mathematical Instruments Office) now manufactures a variety of scientific and precision instruments for the use of government departments.

A scheme of reorganization was undertaken during the first Plan at a cost of Rs 18 million. Proposals for further expansion during the second Plan have been approved and Rs 2·2 million has been allotted for the purpose. An optical glass project is also to be taken up.

Hindustan Aircraft Factory

Started in 1940-41 for the assembly and manufacture of military aircraft, this factory at Bangalore played a prominent role in the development of civil aviation in India after World War II by overhauling large numbers of war surplus aircraft for the airlines companies. In 1948, work was begun on a modern all-metal basic trainer aircraft—the now well known HT-2, which has received world-wide acclaim.

Besides its main work connected with the manufacture, repair and overhaul of aircraft, the Bangalore factory manufactures rail coaches and bus body kits. Several hundred all-metal rail coaches have already been built, and it is proposed to take up the manufacture of about 300 of the new integral-type coaches per year during the second Plan.

Chittaranjan Locomotive Works

The Chittaranjan Locomotive Works, the largest of its kind in Asia, was completed in 1950. It was initially designed to produce 120 locomotives and 50 spare boilers per year. The capacity was later increased to 200 average-size locomotives and 100 spare boilers.

In order to meet the heavier requirements in the second Plan period, the works will be expanded. A provision of Rs 50 million has been made for the purpose. This will increase production at Chittaranjan to 300 locomotives a year. TELCO (the Tata Works) is also expected to raise its output of metre-gauge locomotives to 100 a year. It is therefore expected that, by the end of the second Plan, the demand for locomotives in the country will be met largely from indigenous sources.

A foundry at Chittaranjan will also be set up for the production of locomotive steel castings, which are at present imported. The initial capacity of the foundry will be 7,600 long tons.

Coach Factories

A factory designed to produce 350 light-weight steel railway coaches a year began production at Perambur, Madras, in September 1955. The total cost of the project is Rs 73·5 million. It is expected that the factory will produce 350 coaches a year from 1957 onwards.

A new metre-gauge coach factory, designed to produce 200 fully furnished coaches per annum, will be built at a cost of Rs 75 million.

With these two factories in operation, in addition to the work in the Hindustan Aircraft Factory, the production of coaches is expected to reach 1,800 per annum by the end of 1960-61.

Newsprint Factory

In 1950-51, all the newsprint used in India was imported. The construction of the State-aided NEPA mills in Madhya Pradesh began during the first Plan. The factory started experimental production in January 1955. The chemical pulp section came into operation in early 1956. When in full production the NEPA mills will produce 30,000 tons of newsprint, based on the utilization of chemical pulp from bamboo and mechanical pulp from salai-wood.

Electronics Factory

The construction of a factory to manufacture electronics equivalent, including radar, valves and other specialized components, was taken up in October 1954 at Bangalore under an agreement with a French firm. Production started in 1955 and the factory has already manufactured the first series of ten general-purpose receivers. Another series of 50 receivers is expected to be completed soon. By 1959-60 the plant is expected to be in full production.

Heavy Electrical Equipment Factory

In November 1955, an agreement was signed with a British combine under which the latter undertook to act as technical consultants for a new State factory to manufacture heavy electrical equipment, such as hydraulic turbines and generators, transformers, etc.

The factory, which will be located at Bhopal, will begin production within seven or eight years.

Oil Exploration

Two oil refineries were set up at Trombay near Bombay during the first Plan period by foreign firms. The Burmah Shell refinery started operating in January 1955 and reached full production by the middle of the year. It has a capacity for utilizing 2 million tons of crude oil per annum. The Standard Vacuum refinery, which went into production in 1954, has a capacity of about 1·2 million tons. A third refinery, that of Caltex (India), has started production at Vishakhapatnam

The production of the existing refineries has made India surplus in motor spirit and furnace oil, but there are deficiencies in kerosene, diesel and lubricating oils, bitumen and aviation spirit. During the second Plan, the exploration and development of the country's oil resources will be given a higher priority. Explorations started earlier in the Jaisalmer area of Rajasthan and in Cambay will be continued and an aero-magnetic survey will be conducted over certain parts of the Punjab, U.P. and Bihar. The Government will continue to participate with the Standard Vacuum Oil Co. in its explorations in the West Bengal basin. In addition, proposals are under consideration for a joint exploration of the Assam area, where oil was struck in 1953 in partnership with the Assam Oil Company.

Synthetic Oil Projects

Project reports on the establishment of synthetic oil plants capable of producing about 300,000 tons of liquid fuel (mainly aviation spirit, petrol and diesel oil) per annum have been received from three foreign firms. The reports are being considered by a committee of experts. A decision regarding the implementation of the project during the second Plan will be taken in the light of the Committee's recommendations.

Atomic Energy Project

The Rare Earths Factory at Alwaye in Kerala, which was completed in 1952, is of special importance as it extracts residual thorium-uranium from the monazite sands of the area for use in atomic energy development. The capacity of the processing plant will be doubled during the second Plan to 3,000 tons of monazite per year.

A thorium-uranium plant at Trombay, which began production in 1955, further processes the material received from Alwaye and produces thorium nitrate and uranium. A uranium purification plant is to be built at Trombay during the second Plan period, as well as a pilot plant for extracting uranium ore at the Indian Copper Corporation's factory at Ghatsila, West Bengal.

The Rare Earths Factory also manufactures rare earths products and trisodium phosphate. In addition to these, there are other projects in the atomic field which are at an advanced stage of planning or investigation and are likely to be functioning by 1961. They will facilitate the exploitation of India's rich atomic resources and accelerate the process of harnessing atomic energy for peaceful purposes.

A swimming pool reactor, designed and built at Bombay, went into operation in July 1956. The reactor will produce isotopes for geological, medical and industrial research and will be used for training engineers for subsequent projects. Another high-power high-flux reactor, to be built with the assistance of Canada under the Colombo Plan, is expected to come into operation in 1958.

Iron and Steel

The first modern steel plant in India was established by the late J. N. Tata, who set up the Tata Iron and Steel Works at Jamshedpur in 1907. The grant of protection to the indigenous iron and steel industry in 1924 resulted in its rapid development. World War II gave a further impetus to the industry.

According to the 1952 Census of Manufacturing Industries, there were 137 iron and steel works in India. The most important of them were: (1) the Tata Iron and Steel Company's works at Jamshedpur, (2) the Indian Iron and Steel Company's works at Hirapur and Kulti and (3) the Mysore Iron and Steel works at Bhadrawati.

At the end of the first Plan India's steel production stood at 1·26 million tons, the bulk of which came from the Tata and Indian Iron and Steel plants in the private sector. In the second Plan, with its emphasis on large-scale State investment in basic industries, three new steel plants of 1 million tons ingot capacity each are to be established at Rourkela (Orissa), Bhilai (Madhya Pradesh) and Durgapur (West Bengal) in the public sector. These three projects will cost Rs 3,500 million, of which Rs 750 million will be foreign assistance by way of participation in capital, deferred payments for plant and machinery and other forms of credit. The plant at Rourkela will entail an outlay of about Rs 1,280 million and will produce 720,000 tons of flat products of steel. The second plant at Bhilai in Madhya Pradesh will cost Rs 1,100 million and will produce 770,000 tons of saleable steel. The third plant at Durgapur will cost about Rs 1,150 million. With the production of the Mysore Iron and Steel Works raised to 100,000 tons, the output of finished steel in the public sector at the end of the second Plan should be about 2 million tons per annum.

In the private sector, also, steel production will be increased and a total investment of Rs 1,150 million is envisaged. On the completion of these schemes, the combined capacity of the Tata Iron and Steel Company and the Indian Iron and Steel Company will increase from 1·2 to 2·3 million tons.

South Arcot Lignite Project

In view of the scarcity of coal deposits in South India, the second Plan provides for a multi-purpose lignite project at Neyveli. Under this project, 3·5 million tons of lignite will be mined and used for (1) the generation of power of 211,000 kW; (2) the production of carbonized briquettes at the rate of 380,000 tons per annum; and (3) the production of 70,000 tons of fixed nitrogen in the form of urea and sulphate nitrate.

Coal

The bulk of coal production in India has been in the private sector till now, the public sector accounting only for 4·5 million tons of a total production of 38 million tons. On the basis of the industrial targets in the second Plan and the programmes of power generation and railway expansion, it is estimated that the demand for coal at the end of the Plan will be about 60 million tons.

To achieve this target, new coalfields will be developed and existing collieries will be more intensively worked. Of this additional production, 12 million tons will be mined in the public sector and the balance in the private sector.

Engineering

Although some articles like abrasives were produced in India before 1939, the real beginning of the engineering industry was during World War II. After independence, the Government did its utmost to foster the growth of this industry. As a result, India became self-sufficient in a variety of articles like motors, batteries for motor cars, ceiling fans, conduit pipes and metal sheets for utensils. Every year new units were added and in 1954 there were 62 different lines of manufacture in India.

Since 1954, the Government has concentrated on the development of the automobile industry along sound lines. Several programmes for the manufacture of improved automobile ancillaries like wheels and rims, clutches and hydraulic brakes have been formulated. The other manufacturing programmes include jute mill machinery, capstan and turret lathes, wind-mills, steam and diesel road rollers and agricultural tractors.

During the second Plan, higher levels of production are expected in respect of structural fabrications, automobiles, railway rolling stock, castings and forgings, industrial machinery, bicycles, sewing machines, motors and transformers.

Chemicals

Since independence, steady progress has been made in the development of the chemical industry. The establishment of the Sindri factory in the public sector was a significant development in this direction. In the private sector 60 companies dealing with chemicals came into existence during the period 1946-50. In 1954, 134 of these items were being produced in the country. Among the products being manufactured for the first time in India were sheet glass, penicillin, DDT, chloromycetin, glacial acetic acid and acetic anhydride, bismuth salts and ammonium chloride.

Steps are being taken for the large-scale development of chemical industries in diverse fields. Efforts are also being made to manufacture intermediates required for the production of dyestuffs and pharmaceuticals.

Cotton Textiles

The history of the cotton textile mill industry, which is India's premier industry, dates back to 1818, when the first cotton mill was established at Fort Gloster near Calcutta. The real growth of the industry, however, started with the setting up of the Bombay Spinning and Weaving Mills in 1856. The grant of protection and the spread of the Swadeshi Movement enabled the industry to make rapid strides. The number of mills increased to 389 in 1939, with a loomage of 202,464. World War II brought a fresh boom, which persisted after 1947.

Cloth production touched new records in 1956. The total production of the mills was nearly 5,280 million yards of cloth. Handloom production was 1,479 million yards in 1956.

During the second Plan the output of cotton textiles (all sectors) will be increased by 25 per cent, *i.e.*, from 6.700 million yards to 8,400 million yards. The target for yarn production is 1,950 million pounds.

Jute

As the biggest earner of foreign exchange for India, the jute industry occupies an important place in the country's economy. Besides employing about 300,000 workers, it provides work for a large number of intermediaries.

The first power-driven jute mill was established near Rishra in Calcutta in 1859. Since then the industry has made steady progress. At present there are 85 jute mills in India. The production of jute goods stood at 1 million tons during 1955.

To encourage modernization, licences for the import of modern machinery have been granted to the mills. Arrangements are being made for the indigenous manufacture of machinery, and three firms have been licensed for this purpose. The Government has also decided to grant loans through the National Industrial Development Corporation for the modernization of machinery and equipment. Forty-four mills out of a total of 85 have been modernized already or are in the process of modernization.

Plantations

Tea, coffee and rubber plantations cover less than 0·4 per cent of the total crop area and are concentrated mainly in the North-east and along the South-west coast. They provide employment for more than a million families and India earns about Rs 800 million in foreign exchange from their export, tea alone accounting for Rs 780 million. Coffee and rubber, which used to be important export commodities, are now largely consumed within the country. The production of tea, coffee and raw rubber during 1955-56 was 663·6 million lbs.. 34,019 tons and 23,450 tons, respectively.

Small-scale and Cottage Industries

Although there has been considerable development in large-scale industries, India remains largely a country of small-scale production. It is estimated that there are about 20 million persons engaged in cottage industries. The handloom industry alone employs 5 million, or nearly as many as are employed in all other organized industries, including large-scale industries, mines and plantations.

The work of organizing these small industries is primarily the responsibility of the State Governments. To supplement their efforts, the Central Government has set up six organizations, namely, (1) the All-India Khadi and Village Industries Board; (2) the All-India Handicrafts Board; (3) the All-India Handloom Board; (4) the Small-scale Industries Board; (5) the Coir Board, and (6) the Silk Board. Of these, the Coir and Silk Boards are statutory bodies.

Financial assistance to small industries is given both by the Government and by banking institutions. Recently, measures have been taken to make this assistance more effective. A recent development is the proposal to set up 14 industrial estates. Six regional offices have been appointed to expedite the sanction and implementation of State Government schemes.

A programme of technical assistance to small industries through an Industrial Expansion Service has been undertaken directly by the Central Government. Besides four Regional Small Industries Service Institutes, five institutes and seven branch institutes have been established in different States. Forty-eight industrial extention centres have been sanctioned to assist individual small-scale units in their common technical problems and in some places to provide common service facility centres for groups of manufacturers. Experts are brought from abroad to help these industries in technical matters.

Another significant development has been the establishment, in February 1955, of the National Small Industries Corporation as a joint stock company with a capital of Rs 1 million. Its Contract Division has established liaison with

Government Purchase Departments and has evolved a workable arrangement for giving contracts to small units. The Corporation has introduced a scheme for the hire purchase of machinery and equipment needed by small units for improvement or expansion on easy instalments. To expedite the work, especially that relating to hire purchase of machinery, subsidiary corporations are being set up in Bombay, Calcutta, Delhi and Madras.

For the development of small industries, the Ministry of Community Development has appointed Block Level Industrial Officers in a number of Community Projects and National Extension Service blocks. An intensive development programme has been introduced in 26 selected pilot project areas.

Special attention is being paid to the marketing of handicrafts both in India and abroad. Mobile exhibition units have been sent round the country, and funds allocated for the exhibition of metalware, bambooware, etc. Handicrafts Weeks have been celebrated in several States. Plans have now been drawn up for the building of a museum of handicrafts in Delhi.

The programmes for these industries have been considerably increased in the second Plan, which has assigned them the important role of meeting most of the additional demand for consumer goods and substantially increasing employment opportunities. The second Plan provides Rs 2,000 million (seven times the amount provided in the first Plan) for their development. in addition to working capital requirements.

CHAPTER IX

FOREIGN TRADE

Before World War II India normally had a favourable balance of trade. Her export surplus was, however, mostly expended on the payment of dividends on British capital and the salaries and pensions of British officers in India. In the wider pattern of the international balance of payments, she was among those countries which were net dollar earners and made over these earnings to the metropolitan countries of Europe to meet the deficit in their balance of payments.

Until the thirties, the structure of India's foreign trade followed the traditional pattern of a colonial country. India imported manufactured articles and exported raw materials and semi-processed goods.

After 1930 there was a noticeable change in the structure of India's foreign trade. Her imports of finished goods began to decline while those of industrial raw materials increased.

Among manufactured articles, the fall in the import of textiles was most remarkable. The import of sugar also progressively declined, until in 1935-36 indigenous production was able to meet the domestic demand. On the other hand, the import of foodgrains had increased to the value of Rs 220 million by 1939-40, mainly as a consequence of the separation of Burma from India.

During the inter-War depression, India's exports dwindled. The fall in the price of agricultural raw materials, coupled with a decline in the demand for Indian goods, caused a steep fall in exports. Thanks mainly to substantial exports of gold on private account, however, India continued to have a favourable balance in her foreign trade. The position improved after 1936.

TURNING POINT

World War II considerably helped India's industries and trade. Europe's productive potential was badly depleted, and the shortage of merchant shipping contributed greatly to the fall in imports. Exports, on the other hand, found expanded markets in the countries of West and South-east Asia. The decline in imports, coupled with the increase in exports, served to swell the country's substantial export surplus. After liquidating the whole of her sterling debt, India built up a balance of about Rs 16,000 million in sterling.

With the growth of industries, the structure of India's foreign trade was radically altered. The country started importing more and more raw materials for her industries and her exports of manufactured goods expanded.

The direction of India's import and export trade also underwent significant changes. Before 1938, over half the volume of India's foreign trade was with the sterling area and only about 10 per cent with the dollar area. In the following decade, India's trade with sterling area countries fell sharply. India's needs were no longer met largely by imports from the U.K. The U.S.A., Egypt, Japan and Australia found an expanding Indian market for their goods. Similarly, India's exports to the U.K. steadily decreased in volume and the U.S.A., Singapore, Australia and Canada imported her goods in increasing quantities. The share of the dollar area in India's foreign trade rose to 20 per cent.

The favourable balance during World War II did not flow from any inherent strength in India's economy. It vanished soon after the termination of the war and the return of normal conditions. The inflationary situation in the country raised the prices of export commodities and caused a relative decline in exports. For instance, jute goods, which accounted for over 33 per cent of India's total earnings of foreign exchange and over 62 per cent of the earnings of hard currency, became so expensive that substitutes made of paper and cotton came to be increasingly used in the U.S.A. Exports of cotton yarn and manufactures, too, declined and the market for castor seed and oil was virtually lost. Increasing competition from other countries was also partly responsible for the setback.

Furthermore, after the war imports were required on a large scale to relieve the war-time austerity and depreciation of capital equipment and to meet the long pent-up demand for consumer goods. In the absence of any effective restrictions there was a surfeit of imports and the country was faced with an excess of imports over exports.

The partition of the country in 1947 aggravated the situation by reducing two of India's export industries to dependence on imported raw materials. Commodities such as jute, cotton, wool and hides and skins not only disappeared from the list of exports but figured prominently among imports. Foodgrains, too, had to be imported in large quantities from hard currency areas. This imposed a severe strain on the country's foreign exchange resources.

Before 1947, India had a large re-export trade because of her favourable geographical situation. Partition, however, deprived her of a large part of this re-export trade, especially in respect of goods which came across the land frontiers and the North-west. In consequence, the adverse balance of trade rose to Rs 1196·2 million in 1948-49 as against Rs 370·7 million in 1947-48 and Rs. 222·8 million in 1946-47.

IMPORT RESTRICTIONS

Immediate steps were taken by the Government to improve this position. The import of consumer goods was restricted to the minimum and exports stimulated. The emphasis shifted from export control to export promotion. Other measures adopted were the progressive liberalization of export controls, conclusion of trade agreements and arrangements with foreign countries, consolidation of commercial services abroad, participation in international fairs and exhibitions, opening of show-rooms in important centres of world trade, standardization of Indian goods and effective commercial servicing and publicity.

Simultaneously, efforts were made to step up the production of essential raw materials required for domestic consumption, without which a permanent large-scale expansion of exports was not possible. Tax relief was granted on certain commodities and import duties on raw materials were reduced.

Bilateral trade agreements were concluded with several countries, such as Switzerland, Hungary, Poland, Finland, Egypt, Iraq, Afghanistan, Australia, Burma, Czechoslovakia, West Germany, Austria, Indonesia and Japan. The main object of these agreements was to establish direct trade contacts to secure essential and scarce goods not otherwise obtainable, and to promote the sale abroad of Indian goods. As a result of these measures, India's adverse balance was reduced to Rs 753·1 million (sea and air) in 1949-50.

The devaluation of the rupee in September 1949 had a favourable effect on India's foreign trade. From October 1949 to November 1950 the value of goods exported amounted to Rs 6,133 million as against Rs 4,796·7 million in the corresponding period of 1948-49, an increase of 21·8 per cent. During the same period, the value of exports to the dollar area rose from Rs 1,147·4 million to Rs 1,508·3 million, or by 31 per cent. The exports to other hard currency areas increased by 23 per cent.

Devaluation also conferred an indirect benefit on the export trade with soft currency areas. The value of exports to these countries in the 14 months of the post-devaluation period rose to Rs 4,604·7 million as against Rs 3,649·3 million during the equivalent period preceding devaluation. The value of exports to these countries thus registered an increase of 26 per cent. In consequence, the adverse balance of trade, a familiar feature after Partition, was considerably reduced.

In 1950-51, India for the first time in the post-war period recorded a favourable trade balance of Rs 214·4 million in her sea and air-borne trade. India's total exports rose in value from Rs 4,853·2 million in 1949-50 to Rs 5,783·2 million in 1950-51. The total trade reached its peak in 1951-52 in the wake of the Korean War and then declined. After 1954-55, however, it again started rising. The total value of (merchandise) trade increased to Rs 13,899 million in 1955-56 as compared to Rs 12,782 million in 1954-55 and Rs 11,315 million the preceding year.

Exports in 1955-56 amounted to Rs 6,422 million as compared to Rs 5,966 million during 1954-55. Similarly, imports rose from Rs 6,816 million in 1954-55 to Rs 7,477 million in 1955-56. The contraction of the adverse balance during these years was mainly due to a reduction both in the value and quantum of imported raw cotton, foodgrains and machinery of all kinds. The over-all deficit in the trade balance during 1955-56 was Rs 1,055 million, as compared to Rs 850 million in 1954-55.

While imports of foodgrains dropped, those of industrial raw materials showed an increase. This reflected a higher level of industrial activity and production in the country. With the expansion of internal production, imports of selected commodities were liberalized and export control policy was relaxed. Import quotas were pared in the case of commodities adequately produced in India, whereas they were increased for essential goods.

Meanwhile, the progress of development activities in the country has led to an increase in exports. Jute yarn and manufactured tea and cotton piece-goods continue to be important foreign exchange earners. Recently there has been an increase in the export of vegetable oils, raw cotton and shellac.

To stimulate exports, the Government has established Export Promotion Councils for (a) cotton textiles, (b) silk and rayon textiles, (c) plastic goods, (d) engineering and (e) cashewnuts and pepper. The Cotton Textile Promotion Council sent a delegation in 1955 to Burma, Thailand, Singapore, Malaya, Indonesia and Ceylon to study market conditions in those countries. The Silk and Rayon Council obtained market reports and samples on silk and rayon piece-goods from foreign countries and circulated them among representatives of trade and industry. The Engineering Council sent a team of experts to Burma in 1955 to explore the market for engineering goods.

Another step to promote exports is the introduction of a scheme for "drawbacks" of custom duties on imported goods used in the manufacture of articles. During 1955, the Government also set up a committee to draft an Export Credit Guarantee Scheme suitable for Indian conditions. The services of an expert from the department of Export Credit Guarantee in the U.K. were obtained to help this committee.

DIRECTION OF TRADE

The U.K. and the U.S.A. continued to be India's principal buyers and suppliers during 1954. The distribution of imports by countries of origin was: U.K. 23·7 per cent, U.S.A. 11·9 per cent, Burma 7·5 per cent, Egypt 4·3 per cent, other countries 52·6 per cent. The share of the U.K. in exports was 31·2 per cent and that of the U.S.A. 15·2 per cent. The shares of the U.K. and the U.S.A. in exports, however, registered a decline in 1955, while those in the import trade increased. As regards other countries, imports from West Germany, Japan, Kenya, France, Iran and Pakistan increased while those from Egypt, Italy, Saudi Arabia and Singapore declined slightly. As regards exports, Japan, Canada, the Netherlands, Indo-China and Indonesia bought more while exports to Burma fell.

India's trade with the U.S.S.R., Yugoslavia, Poland, Hungary and Rumania has shown a rising trend. In accordance with the recommendations of the Bandung Conference, the Government has taken steps to promote trade with countries in the Asian-African region.

TRADE AGREEMENTS

Fresh trade agreements were concluded with Japan and Rumania and an informal trade agreement was made with a delegation from East Germany during 1954. An Indo-Chinese trade agreement, valid for two years in the first instance, was signed on October 14, 1954. A special feature of this agreement was that it recognized the need to maintain and strengthen the customary trade between India and Tibet. Immediately after the signing of the agreement, formal agreements were made with the Chinese trade delegation for the export of 9 million pounds of tobacco in exchange for 90 tons of raw silk from China.

Agreements were also concluded in December 1955 with the Governments of the U.S.S.R. and Italy. The U.S.S.R.

undertook to supply 1 million tons of steel during the next three years. It also agreed to supply equipment for oil mining and other machinery and goods. In return, the U.S.S.R. was to substantially increase its purchases from India to the extent of the total value of the goods supplied by it. Under the agreement with the Italian Government, Italy undertook to encourage fruitful co-operation between Italian and Indian firms by way of sharing technical skill, providing technicians and supplying equipment and machinery, including long-term credit facilities for the supply of machinery.

A fresh trade agreement was concluded with Pakistan in July 1955, valid for a year from September 1, 1955. It provided for the continued movement of jute and coal and also envisaged the revival of trade in other commodities. A special feature of the agreement was that it provided facilities for people residing on both sides of the border with East Pakistan to buy and sell on a small scale across the border without the usual formalities.

The improvement in the domestic economy has made itself felt in external trade. The country's balance of payments on current account showed a surplus of Rs 403 million in 1955.

India repurchased her obligations from the International Monetary Fund to the extent of Rs 222 million in 1954-55. Her liabilities to the Fund were reduced by Rs 71 million in 1955-56.

The dollar position also showed an improvement during 1955. As a result, India made a net contribution of $53 million to the Central Reserve in 1955.

SECOND PLAN

The second Plan envisages an expanded investment and lays stress on industrialization. This will involve a heavy strain on foreign exchange resources. It is expected that while exports will rise moderately from an estimated level of Rs 5,730 million in 1956-57 to Rs 6,150 million in 1960-61, imports will rise substantially over the first four years, resulting in a negative trade balance of about

Rs 13,750 million over the Plan period, or Rs 2,750 million a year on an average. After allowing for a surplus on invisibles, the deficit on current account works out to a total of Rs 11,200 million or Rs 2,240 million a year.

The above deficit will have to be matched by a net inflow of foreign resources of the same order either on private or government account. It was originally proposed to cover the gap in the following manner:

(1) withdrawal from the sterling balances—Rs 2,000 million;
(2) the expected inflow of private capital—Rs 1,000 million;
(3) external finance to be raised by the Government —Rs 8,000 million.

The actual deficit during the recent period has, however, increased. Imports have risen owing to the increased demand for machinery and other goods for development and defence projects. On the other hand, the export of items such as raw cotton, vegetable oils and jute manufactures has declined owing to an unforeseen fall in production. The increased deficit has also been due to a rise in the prices of imported goods, the closure of the Suez Canal and larger imports for development in the private sector. During 1956, imports rose by Rs 1,590 million while exports decreased by Rs 30 million, resulting in an increase in the deficit to Rs 2,020 million.

Efforts are being made to improve the foreign exchange position by promoting exports, cutting down non-essential imports, imposing restraint on consumption and mobilizing resources under the Plan.

To promote exports, restrictions have been relaxed and trade agreements with other countries revised. During 1956 there were 15 trade agreements in force and eight more were signed. In addition to the Export Promotion Councils, an Export Risk Insurance Corporation has been established at Bombay to cover risks which are not normally taken care of by commercial companies. Quality standards for export goods have also been enforced. Another significant development has been the establishment of a State Trading Corporation to supplement the existing trading mechanism. The Corporation will play an increasingly significant role in diversifying and developing the counrty's foreign trade. Besides its organization at Delhi, the corporation has regional offices at Calcutta, Madras, Bombay and Vishakhapatnam. A Foreign Trade Board has also been set up to co-ordinate the working of various institutions set up to promote the export trade.

A committee of experts has recently been appointed to review steps taken in connection with the promotion of exports and to suggest further measures.

CHAPTER X

SCIENTIFIC RESEARCH

Before World War II, very little was done by the State to harness science for the benefit of industry. The war brought home the need for a central research organization, and in 1940 the Government set up a Board of Scientific and Industrial Research. The present Council of Scientific and Industrial Research was established in 1942. In 1948, a Department of Scientific Research was created to supervise and co-ordinate research work undertaken by the State and private institutions. Subsequently the Department became part of the Ministry of Natural Resources and Scientific Research, which was established in 1954.

In the first Plan attention was devoted to building up a chain of national laboratories and other research institutions. India now has national research laboratories for physics, chemistry, metallurgy, fuel, drugs, glass and ceramics, food technology, electro-chemistry, leather, roads, building, electronics and salt. A national botanical garden scheme is also in operation at Lucknow. Besides these national laboratories, there are 88 research institutions and centres, 54 research associations in the field of technology and research departments in 33 Universities. An attempt is made to link the work of the national institutions with those functioning at the regional and State levels. Promotion and co-ordination and the financing of programmes are carried out by the Council of Scientific and Industrial Research.

While the national laboratories have specific programmes connected with industry, important institutions devoted to pure research include (1) the Birbal Sahni Institute of Palaeobotany, Lucknow; (2) the Bose Research Institute, Calcutta; (3) the Indian Association for the Cultivation of Science, Calcutta; (4) the Indian Institute of Science, Bangalore; (5) the Indian Academy or Science (Raman Institute) Bangalore, and (6) the

Tata Institute of Fundamental Research, Bombay. All these are assisted by the Government.

NUCLEAR RESEARCH

An important sphere of work is nuclear research. This programme is entirely devoted to the harnessing of atomic energy for peaceful and constructive purposes. An Atomic Energy Commission was set up in 1948 to lay the foundation for atomic energy development and to train scientists. Some years later, in 1954, a Department of Atomic Energy was formed to take charge of development work in this field.

In 1955 the construction of an Atomic Energy Establishment was started at Trombay, near Bombay. A swimming pool-type reactor, entirely built by Indian personnel, was completed here in August 1956. It will produce isotopes for biological, medical and industrial research and train engineers for other projects. Another high-power high-flux reactor, received from Canada under the Colombo Plan, is expected to come into operation by 1958.

Many of the materials used in atomic energy development are found in India itself. Processing techniques, too, are being developed. There is a factory at Alwaye in Kerala State which processes the monazite sands found in that State for the extraction of thorium-uranium cake. This material is further processed in a plant at Trombay for the production of thorium nitrate and uranium. Several new processing plants, as well as one to manufacture heavy water, are to be set up during the next few years in various places.

An important link between research and industry was forged in 1953 with the establishment of a National Research Development Corporation. This corporation is to set up plants to test the commercial utility of discoveries, thus securing the fullest possible use by industry of the results of research in various fields

SECOND PLAN

Generally speaking, the policy in the first Plan was to create new opportunities for research. In the second Plan, with its larger industrial programmes, research is to be intensified and the Plan provides Rs 200 million for the programmes of the Council of Scientific and Industrial Research. Several new research institutes are to be set up and the committees of the Council have drawn up comprehensive programmes relating to scientific and technological subjects, engineering and biology. In addition, the University Grants Commission is providing Rs 170 million for research work in the universities.

A proposal calculated to widen the basis of research is that relating to the establishment of *vigyan mandirs* or rural scientific research centres. Situated in areas under the community development programme, they will disseminate information about such things as soil, plants, health and sanitation. Three centres have already been set up and it is proposed to organize 90 to 100 of them by 1960-61.

CHAPTER XI

PUBLIC FINANCE

There is no single central authority in India for the raising and disbursement of public funds. Under the Constitution, the power to raise funds has been divided between the Central Government and the States. Thus the Centre and each State Government have separate budgets and treasury arrangements. The Constitution provides for parliamentary and independent audit control of government appropriations and disbursements. The railways, the largest nationalized undertaking, have a separate budget and maintain separate accounts. This separation has been brought about by a *pro forma* separation of railway transactions, but ultimately the railway balances merge with the general cash balance of the Government of India.

REVENUE

The main sources of Central revenue are customs duties, excise duties, corporation tax and income-tax (excluding tax on agricultural income). About 80 per cent of the revenue comes from customs and excise duties and the corporation and income taxes. The railways pay a fixed dividend to the Central revenues on the capital invested on them. Similarly, the net profits of the Posts and Telegraphs and other commercial undertakings flow into the Central revenues. Another important source of income are the surplus profits of the Reserve Bank.

The main sources of revenue in the States are land revenue, tax on agricultural incomes, taxes on lands and buildings, State excise duties, sales tax, taxes on vehicles, etc., the States' share of income tax and Union excise duties, the entire net proceeds of estate duty levied and collected by the Central Government but assigned to the States and grants from the Centre. At present, 55 per cent of the net proceeds of income tax (other than corporation tax and tax recovered from Union emoluments), and 40 per cent of the net proceeds of the excise duties on matches, tobacco and vegetable products are assigned to the States. The Central Government, following the recommendations of a Finance Commission, has, however, agreed to increase the States' share of income tax to 60 per cent. The range of divisible excise duties has also been widened to include the duties on sugar, tea, coffee, paper and vegetable non-essential oils, the States' share being fixed at 25 per cent of the net proceeds. There are no taxes reserved for local bodies and the States are free to assign any of the taxes on the State List, either in whole or in part, to local bodies.

The Report of the Taxation Enquiry Commission, appointed in 1953, was published in 1955. The Commission recommended a widening of the base and range of taxation, both direct and indirect, and readjustment of the rate structure. Some of the Commission's recommendations have already been implemented.

Income Tax and Estate Duty

Prior to the 1957-58 Budget, the income tax exemption limit for individuals was Rs 4,200. This is now proposed to be lowered to Rs 3,000 a year. Certain classes of income are also exempt from tax. These include agricultural income, incomes of religious and charitable institutions (including property held in trust), incomes of educational institutions, incomes of local authorities earned within their jurisdiction and casual earnings such as prize money. Capital gains arising on or after April 1, 1956, have been made liable to income tax. Taxes appearing for the first time in the 1957-58 budget are a wealth tax and an expenditure tax.

In the matter of estate duty, broadly speaking, all property, movable or immovable, situated in India which passes (*i.e.*, changes hands) on death is liable to duty, subject to a general exemption limit of Rs 100,000 (in the case of an interest in Hindu Undivided Family property Rs 50,000 only) in value. Certain other exemptions are also made under the provisions of the Estate Duty Act,

Loans and Small Savings

The response to Government Loans and the collection of small savings in recent years have been encouraging. The total interest-bearing obligations of the Central Government of undivided India, which stood at Rs 12,058 million at the end of 1938-39 will, it is estimated, be Rs 43,269 million at the end of 1957-58.

During the year 1956-57, three market loans of short, medium and long-term maturity were floated by the Government of India. The total amount realized from the three loans together was Rs 1,577 million. A number of State Governments also floated loans during 1956-57. The amount thus raised was about Rs 685 million. A feature of recent years has been the tremendous growth of small savings. From Rs 2,683 million in 1946-47, small savings outstanding at the end of 1957-58 are estimated to be of the order of Rs 7,175 million.

External Debt

The sterling public debt, which stood at Rs. 4,649 million in 1938-39, came down to Rs 555 million at the end of 1946-47 and is estimated at Rs 216 million at the end of 1957-58. Dollar loans, on the other hand, have progressively increased from Rs 125 million in 1949-50 to an estimated Rs 2,042 million at the end of 1957-58. In addition, the outstanding loan from the U.S.S.R. at the end of 1957-58 for the construction of the Bhilai Steel Project is estimated at Rs 393 million.

Pakistan's share of the public debt of undivided India, on the basis of the Indo-Pakistan Financial Agreement, 1947, was provisionally estimated at about Rs 3,000 million, repayable with interest in 50 annual instalments commencing from 1952-53. No payment of any instalment of principal or interest has so far been made by Pakistan.

Assets

The interest-yielding assets of the Government of India are estimated to have increased from Rs 8,967 million in 1938-39 to Rs 34,918 million at the end of 1957-58.

CURRENCY

As a result mainly of substantial export surpluses as well as sizable deficit spending by the Government, currency with the public considerably increased during the second World War. In August 1945 it amounted to Rs. 12,438·3 million for undivided India, *i.e.*, about six times the pre-war level. This currency expansion continued for a few years after the war, but at a slower rate.

On the eve of the first Five Year Plan, currency with the public in the Indian Union stood at Rs 13,314·1 million. A substantial cash surplus on government account in 1951-52 and a sizable deficit in the balance of payments in that year, together with the disinflationary monetary policy pursued by the Reserve Bank since November 1951, resulted in a decline of the currency with the public to the extent of Rs 1,321·6 million by March 1953. From 1953-54, however, under the impact of the rising tempo of development expenditure, currency with the public began to expand at an increasing rate, the total expansion during the last three years of the first Plan amounting to Rs 3,058·4 million. On the eve of the second Five Year Plan it stood at Rs 15,050·9 million, *i.e*, about Rs 1,736·8 million above the level at the beginning of the first Plan. On December 31, 1956, it amounted to Rs 14,941·0 million, and on June 28, 1957, it stood at Rs 15,697·6 million.

Indian currency became legal tender in the former State of Hyderabad on January 26, 1950, and in the former French establishments in India on November 1, 1954. The local currencies were, however, allowed to circulate as legal tender side by side with the Indian currency until April 1, 1955, and April 30, 1955, respectively.

A recent development has been the introduction of decimal coinage in the country from April 1, 1957. The Indian Coinage Act, 1906, has been amended for the purpose.

In the new set-up, the rupee remains the standard coin, but instead of being divided into 16 annas, 64 pice and 192 pies it is divided into 100 units. The unit coin is called *naya paisa.*

The various denominations of the new coins, besides the unit coin (*i.e.* one naya paisa), are as follows:—

2 naye paise
5 „ „
10 „ „
25 „ „
50 „ „
100 „ „ or 1 rupee.

In the new system of coinage, the existing 2 anna, 1 anna, half-anna, pice and pie coins are intended to be withdrawn and replaced by 10 naye paise, 5 naye paise, 2 naye paise and 1 naya paisa coins, though these are not their exact equivalents. The existing 4 anna, 8 anna and rupee coins will, however, have exact equivalents in 25, 50 and 100 naye paise, respectively.

The new coins of 10, 5 and 2 naye paise are of cupronickel alloy, and the one naya paisa of bronze.

On April 1, 1957, coins of the denominations of 1, 2, 5, and 10 naye paise only were issued.

During the transitional period, which may extend to about three years, both existing and new coins will continue in circulation side by side. The existing coins will be withdrawn gradually. Adequate facilities for the conversion of existing coins into new coins have been provided.

BANKING

An indispensable condition for the economic development of a country is a sound banking system. The Banking Companies Act, passed in 1949, consolidated the existing provisions relating to banking in India and added some new provisions. The Act also empowered the Reserve Bank, which was nationalized in 1948, to regulate banking in the country. The Reserve Bank has set up a separate Department of Banking Operations which maintains a close watch on the affairs of banks, carries out periodical inspections and tenders advice and assistance to them whenever necessary.

At the end of 1955, there were 89 scheduled banks in India with 2,858 branches. In addition, there were 66 non-scheduled banks each having paid-up capital and reserves of Rs 5 lakhs and above, and 190 non-scheduled banks each having paid-up capital and reserves between Rs 1 lakh and Rs. 5 lakhs.

The demand and time liabilities of the scheduled banks amounted to Rs 644·74 crores and Rs 457·01 crores, respectively, on December 28, 1956.

An All-India Rural Credit Survey was sponsored by the Reserve Bank in August 1951 with the object of collecting such facts and statistical information as would assist the Reserve Bank, the Government of India and the State Governments in the formulation of an integrated policy in the sphere of rural credit. The report of the Committee which carried out the survey was published at the end of 1954. One of its recommendations related to the establishment of a State Bank of India with branches in all district headquarters and even smaller centres. The Imperial Bank of India was accordingly converted into the State Bank of India on July 1, 1955. Apart from carrying on its previous business, the State Bank will open about 400 branches within five years, provide better remittance facilities and mobilize rural savings. Later, with the development of warehousing and marketing, it is expected to become a powerful agency for the expansion of credit facilities in the rural areas.

Another recommendation of the Rural Credit Survey Committee that has been implemented relates to the creation of two national funds by the Reserve Bank for financing the reorganization of the co-operative movement. The National Agricultural Credit (Long-term Operations) Fund is intended to enable the Reserve Bank to make long-term loans to the State Governments so that they may subscribe, directly or indirectly, to the share capital of co-operative credit institutions which are mainly designed to give rural credit. The National Agricultural Credit (Stabilization) Fund is to be utilized by the Reserve Bank for the purpose of granting interim loans to State co-operative banks, etc., in circumstances in which it is satisfied that the short-term loans of which repayment has become due cannot, without serious dislocation of the credit structure of the States, be repaid in due time on account of famine, drought, etc.; consequently the repayment of such loans or part of them may justifiably be allowed to be deferred.

To relieve the shortage of capital in the private sector, an Industrial Finance Corporation was set up a few years ago to give medium and long-term loans to public limited companies and co-operative societies. Financial Corporations have also been set up by the State Governments. The Reserve Bank has decided to treat the shares and bonds of these corporations on par with government securities.

INSURANCE

Until January 19, 1956, insurance business in India was carried on by Indian and foreign companies, the Posts and Telegraphs Department of the Government of India and, to a limited extent, by certain State Governments.

On that date, the Government of India, by an Ordinance, nationalized life insurance, including the business in India of foreign insurers and the foreign business of Indian insurers. General insurance was not affected and the Posts and Telegraphs Department continued to manage the Postal Life Insurance.

The Government took over control of the affairs of all companies transacting life insurance business and the life portion of the companies transacting all classes of insurance and appointed Custodians to manage the companies. A Life Insurance Corporation was set up on September 1, 1956, to carry on life insurance business in India as a monopoly. This is an autonomous Corporation set up under an Act of Parliament. Its entire share capital has been provided by the Central Government. The Central Government has guaranteed under the Act the payment of all sums assured by the Corporation, including bonuses in cash.

There were over 230 insurance companies (both Indian and non-Indian) and provident societies registered under the Insurance Act (1938) transacting life insurance business before nationalization. The total like insurance business in India in 1955 was Rs 11,230 million.

CHAPTER XII

EDUCATION

"There is no country", says Professor F. W. Thomas, where the love of learning has so early an origin or has exercised so lasting and powerful an influence". In ancient India education was fostered by the State and its influence was widespread. There existed a network of educational institutions, hermitage schools, monasteries, guild schools, academies and Universities. The Universities of Taxila, Nalanda, Kanchi, Madura, Vikramasila, Odantapuri, Nadia and Banaras were famous seats of learning.

The Western system of education was introduced by the British. Their immediate aim in the early 19th century, when education through the medium of English began to spread, was to create a class of lower administrative personnel. Such education continued to be confined to the towns. There was no higher education in the Indian languages and even primary education was neglected. At no time during the British regime did literacy exceed 15 per cent. Facilities for technical and vocational education and research were also extremely limited.

PRIMARY EDUCATION

According to the 1951 census, only 16·6 per cent of the Indian people were literate. At the same time the Constitution required the State to make an effort to provide free and compulsory education for all children up to the age of 14 by 1960. This was the position when the first Five Year Plan came into being.

The Plan laid down two broad objectives—expansion of educational facilities and reorganization of the system of education itself.

As regards the expansion of primary education, it has not been possible to proceed at a pace sufficient to bring about the fulfilment of the constitutional directive. The following table, which gives figures for the start and end of the first Plan and the targets for the second Plan, shows this clearly:

	Number of pupils as percentage of number of children in the corresponding age groups								
	1950-51			1955-56			1960-61		
	Boys	Girls	Total	Boys	Girls	Total	B.	G.	T
1 Primary (6—11 years)	59	25	42	69	33	51	86	40	63
2 Middle (11—14)	22	5	14	30	8	19	36	10	23
Elementary (6—14)	46	17	32	57	23	40	70	28	49

This table shows that the proportion of children aged 6-14 attending schools rose from 32 per cent in 1950-51 to 40 per cent in 1955-56 and is expected to reach 49 per cent by the end of the second Plan. It also shows that while the position in respect of boys of the age group 6-11 is not unsatisfactory, that of the next group is rather disappointing. In both age groups the education of girls has lagged behind. In effect, the position is that out of every 100 pupils who join the first class, scarcely 50 complete four years of schooling, which is regarded as the minimum period for securing lasting literacy.

This pattern is most common in the villages and is due largely to the fact that the older boys are called on to work in the fields during the agricultural seasons. As for girls, social factors have to some extent been responsible for retarding their education.

The underlying cause has, of course, been that the system of education introduced by the British has outlived its purpose. The question of the expansion of primary education is, therefore, bound up with the reorganization of the system.

Basic Schools

The great drawback of the present system is that it lays undue emphasis on academic proficiency, entirely ignoring the practical aspect of true education. In the first Plan, therefore, a policy of converting primary schools into basic schools was introduced, the idea being to develop the personality of the child through a socially useful craft.

The following table indicates the progress made in basic education and the targets under the second Plan:

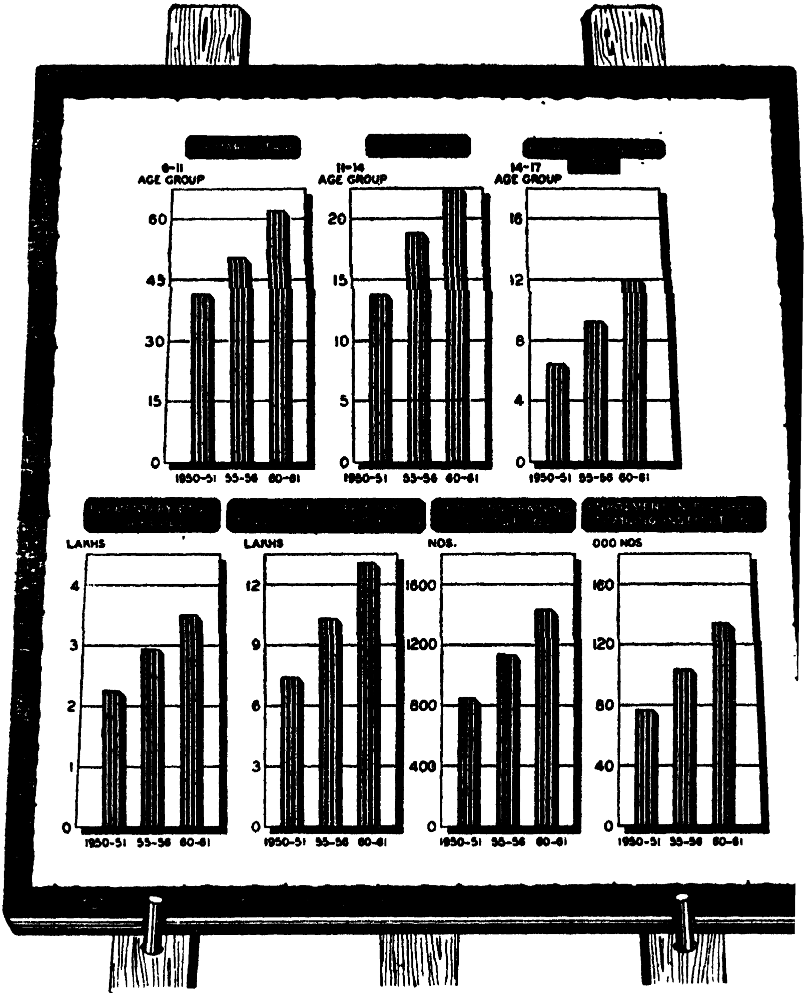
	1950-51	1955-56	1960-61
Schools	1,751	10,000	38,400
Enrolment	185,000	1,100,000	4,224,000
Training Schools	114	449	729

Though progress has been steady, actually only 4 per cent of the primary school-children in India were attending basic schools in 1955-56 and only 11 per cent will be doing so at the end of the second Plan. Two factors which have hampered rapid expansion have been the comparatively higher cost of basic education and the lack of teachers trained in the new methods. It is expected that the first will be mitigated by the sale of articles produced in these schools. It is intended to link basic education with allied programmes like agriculture, village and small industries, co-operation and with the National Extension Service. In this way, basic educational institutions will have a definite place in district development schemes.

As regards the shortage of teachers, it is proposed in the second Plan to undertake large training programmes. New basic training colleges will be opened and existing training centres converted into basic institutions. Teachers will be trained in specialized crafts.

In order to develop basic education on sound lines, the Government of India has decided to set up a National Institute of Basic Education. Apart from research work, the Institute will act as a clearing-house of information.

EDUCATION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SECONDARY EDUCATION

A Commission appointed to consider the problems of education at the secondary stage made its report in 1953. Calling for a complete reorientation of the system, the Commission proposed a greater diversity and comprehensiveness in secondary educational courses, which should include both general and vocational subjects. It was visualized that, following a four or five-year period of primary or junior basic education, there would be a senior basic or junior secondary stage of three years and a higher secondary stage of four years. The first degree course would then be of three years' duration. The Commission also recommended the establishment of multi-purpose schools, technical schools which in some cases could be part of the multi-purpose schools and the provision of special facilities for agricultural education in village schools.

The reorientation of secondary education broadly on these lines has already commenced. During the first Plan about 250 multi-purpose schools were established. This number is to be raised to 1,187 in the next five years. The number of high and higher secondary schools will also go up from 10,600 to 12,000. Agricultural courses will be introduced in many of the rural schools, and about 90 junior technical schools will be set up. Altogether, it is expected that by the end of the second Plan there will be 3·1 million pupils in secondary schools as against 2·3 million at present.

Other aspects to which attention is being paid are the training of teachers for vocational courses and the encouragement of girls' education.

An All-India Council for Secondary Education has been set up to assist the Government in implementing approved programmes and to encourage research into problems relating to secondary education.

These changes in basic and secondary education will have far-reaching consequences. The programmes for the second Plan require large numbers of skilled workers and technicians and the demand will progressively increase in future Plans. In these circumstances, the provision of a practical basis for education is of vital significance.

HIGHER EDUCATION

In 1948, the Government appointed a University Education Commission under the chairmanship of Dr. S. Radhakrishnan. The Commission, which submitted its report in 1949, made far-reaching recommendations for the reconstruction of university education in India. They are now being implemented.

The drawbacks of primary and secondary education under the present system are accentuated at the university stage. The situation has been complicated by the rapid increase during recent years in the number of students in Universities and colleges. Thus, at the end of the first Plan the total enrolment was 720,000 as compared with 420,000 five years before. It is hoped that the diversification of courses at the secondary stage will in future check the rush of students to Arts colleges to some extent.

One of the University Education Commission's recommendations was that Rural Institutes, which would conduct courses in subjects like agriculture and rural engineering, carry on research and generally act as centres of rural planning, should be established. It is proposed to establish 10 of these institutes during the second Plan. The National Council of Rural Higher Education will implement this programme.

In order to supervise and co-ordinate university education, a University Grants Commission has been established. The Commission has taken several measures to improve university education, such as the institution of three-year degree courses, organization of tutorials and seminars, improvement of buildings and laboratories, institution of scholarships and raising of teachers' pay scales.

SOCIAL EDUCATION

Even excluding children below 10 years of age, literacy in India is only 20 per cent. There are also serious disparities in literacy between men (29·6 per cent) and women (9·3 per cent) and between the urban population (34·6 per cent) and the village people 12·1 per cent). While changes in the educational system will improve matters in time steps have already been taken in the States to open adult education classes and social education centres. Libraries have been opened in the villages containing books suitable for neo-literate adults written in various regional languages. Audio-visual education, too, has proved immensely popular.

While the accent is undoubtedly on literacy at first, social education implies something more. Its aim is to improve the economic efficiency of adults and to educate them in citizenship, health matters and the more profitable use of leisure. The community development and other improvement programmes in the rural areas are linked with social education in that they strive for the same goals. The Ministry of Education is to set up a National Fundamental Education Centre which will train personnel, carry on research and produce materials for use in social education.

TECHNICAL EDUCATION

India needs vast numbers of trained personnel for her development plans. At present training facilities are inadequate but they are being rapidly expanded. The following table shows the progress made in technical education during the first Five Year Plan:

	1949-50			1955-56		
	No. of institutions	Intake	Out-turn	No.of institutions	Intake	Out-turn
Post-graduate courses and research facilities	8	136	91	18	270	190
Degree or equivalent courses	53	4,120	2,200	60	6,050	3,700
Diploma courses	81	5,900	2,480	108	8,700	3,90

The All-India Council of Technical Education has kept in mind the need for improvement in quality while increasing the numbers of trained personnel. Particular attention has been paid to the development of facilities in special fields such as management education and training During the first Plan the Council established the Indian Institute of Technology, Kharagpur, as the first of four higher technological institutes intended to be set up in the country. The other three are to be established in a phased programme in the western, northern and southern regions. They will be located at Bombay, Kanpur and Madras. The Kharagpur Institute will be developed during the second Plan to provide under-graduate courses for 1,200 students and post-graduate and research courses for 600 students in a wide range of technical subjects. The other institutes will offer similar facilities. Post-graduate courses and research in engineering and technology at other selected centres are also to be organized.

The technical education expansion programme envisages the development of technical institutions of all types throughout the country and the establishment of new ones. The admissions to technical courses are expected to increase to the following figures:

	Estimated admissions by 1960-61
Post-graduate courses and research work	570
First degree courses	7,5500
Diploma courses	11,30
Junior technical schools	5,400

In addition, the Engineering Personnel Committee set up by the Planning Commission has called for increased training facilities for engineering personnel of various categories in order to fulfil the requirements of the second Plan.

CHAPTER XIII

HEALTH

There is no yardstick by which the health of a nation can be accurately measured, particularly if health is defined as a positive state of well-being and not merely absence of disease. However, the possession of certain vital data does help in assessing a nation's health. An enquiry made by the Health Survey and Development Committee ten years ago revealed the following state of health in India:

Mortality rate	20.8 per thousand
Infant mortality	158 ,, ,,
Percentage of deaths under 10 years of age to total deaths	48.4 per cent
Maternal mortality rate	20 per 1,000 live births
Expectation of life	27 years
Deaths from infectious diseases	6.2 million per year
No. of active cases of T. B.	2.5 million
Average No. of T. B. deaths	500,000 per year

The causes of the low state of health revealed in these figures were many. Apart from lack of adequate medical facilities, other reasons were malnutrition, lack of housing and sanitation and absence of protected water supplies. A start was made in tackling these problems in the first Five Year Plan. As a result, the general mortality rate dropped to 13·4 per 1,000 in 1954. Infant mortality, too, was down to 116 by 1952, and the average expectation of life rose to 32 years by 1954. A change for the better in the nation's health is thus already discernible, and the position will further improve as health measures are intensified during the second Plan period.

In the sphere of health the States are virtually autonomous. The Central Government has responsibilities only in respect of international health, quarantine and standards of higher technical health education. The Union Ministry functions largely in an advisory capacity, except in respect of certain centrally-administered areas, institutions and organizations.

HOSPITAL SERVICES

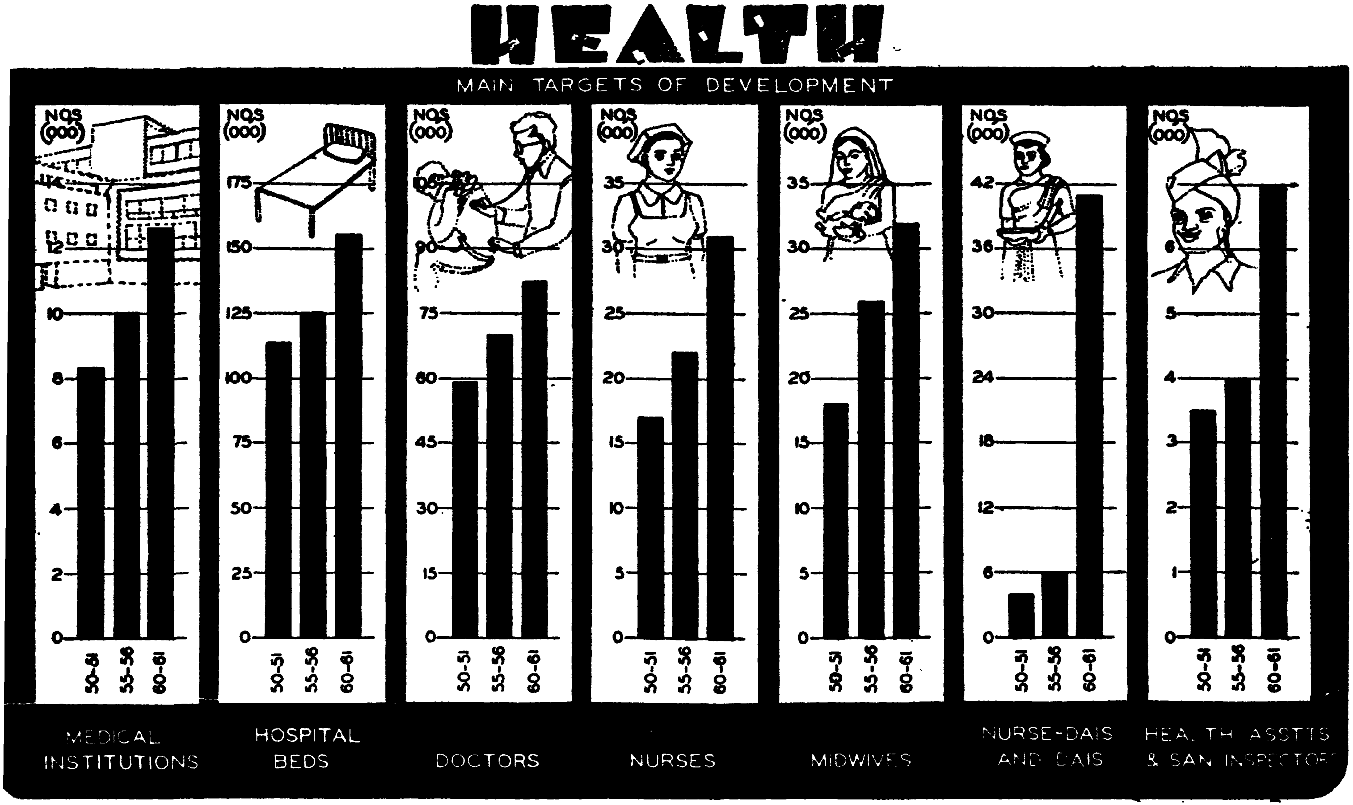
In 1951, *i.e.*, at the start of the first Plan period, there were 8,600 medical institutions (hospitals and dispensaries) in the country with about 113,000 beds. By the end of 1955-56 these numbers had risen to about 10,000 institutions with 125,000 beds.

The aim in the second Plan is to create a co-ordinated regional hospital system which will include four distinct elements—the teaching hospital, the district hospital, the *tehsil* hospital and the rural medical centre associated with a health unit. A *tehsil* is a sub-division of a district. The health units will be established in as many National Extension Service blocks as possible. About 3,000 are to be set up in these and other areas. In this way an elementary type of health organization will be provided throughout the country. About 2,600 new hospitals and dispensaries will also come into existence, raising the total number of beds available to 155,000.

A contributory health service for Central Government employees in Delhi came into operation on July 1, 1954. It provides the same medical facilities to Union Ministers and State employees of all classes and their families. Contributions are on a graded scale according to emoluments and range from 8 annas to Rs 12 per month. Nearly 350,000 people are covered by this scheme.

TRAINING FACILITIES

The expansion of medical facilities in India has been hindered in the past by shortages of doctors, nurses and other health personnel. There were 30 medical colleges in 1950-51 and 12 new ones were set up during the first Plan. The present number of qualified doctors is about 10,000. About 12,500 more are expected to pass out from


HEALTH
MAIN TARGETS OF DEVELOPMENT
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4
6
8
10
12
50-51
55-56
60-61
MEDICAL INSTITUTIONS
NOS (000)
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25
50
75
100
125
150
175
50-51
55-56
60-61
HOSPITAL BEDS
NOS (000)
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30
45
60
75
90
105
50-51
55-56
60-61
DOCTORS
NOS (000)
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50-51
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NURSES
NOS (000)
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HEALTH ASSTTS & SAN INSPECTORS

existing medical colleges in the next five years. Against this, the minimum number of doctors needed by 1960-61 will be about 90,000. It is proposed, therefore, to increase the capacity of the medical colleges and to found six new ones.

Shortages in the case of other medical personnel are even more marked. The following table illustrates the extent of the shortages even after the larger training programmes proposed in the second Plan:

	1950-51	1955-56	1960-61 (target)	No. needed
Nurses	17,000	22,000	32,000	80,000
Midwives (including auxiliary nurse-midwives)	18,000	26,000	35,000	80,000
Health visitors	600	800	2,500	20,000
Health assistants and sanitary inspectors	3,500	4,000	7,000	20,000

An All-India Institute of Medical Sciences is under construction at New Delhi. When completed in 1960 it will consist of medical, dental and nursing colleges, a post-graduate teaching centre, a 650-bed hospital and rural and urban organizations to provide centres for field work.

Much attention has been paid in recent years to the development of indigenous systems of medicine. A research centre and post-graduate institute has been set up at Jamnagar. This is to be developed during the second Plan, which also provides for the opening of five new colleges and 1,100 dispensaries.

MEDICAL RESEARCH

The three main medical research institutes are the Central Drug Research Institute at Kasauli, the All-India Institute of Hygiene and Public Health, Calcutta, and the Malaria Institute of India, Delhi. In recent years a large number of new institutions have come into being. There is now an institute for drug research as well as others for research in chest diseases, leprosy, cancer and mental health.

The Indian Council of Medical Research gives considerable financial and other support to research work in medical colleges. During the second Plan the Council is to set up new institutes for Biology and Research into Occupational Health and to raise the existing Virus Research Centre to the status of an Institute.

The manufacture, sale and distribution of drugs is controlled by the Government. During the first Plan a factory was set up near Poona to manufacture penicillin and other antibiotics. A.D.D.T. factory was also set up at Delhi. Another is proposed to be established in Kerala State. Sulfa drugs are manufactured by the Haffkine Institute at Bombay.

DISEASE CONTROL

Diseases like malaria, filaria and tuberculosis, which used to take a heavy toll every year, have been checked to some extent by concerted measures taken in the past ten years. Malaria control was one of the main health programmes in the first Plan. More than 160 anti-malarial units were set up and it is estimated that they reduced the incidence of the disease by one-third in the areas served. The number of units will be raised to 200 in the second Plan, at the end of which all the malarial areas in the country will have been covered.

Filaria, another mosquito-borne disease to which about 25 million people are exposed, is being countered by the administration of drugs and the destruction of mosquitoes and larvae. There are 13 filaria control units in operation at present; 65 more are to be set up during the second Plan.

It is estimated that nearly 2½ million people suffer from tuberculosis and about 500,000 die of it every year. To check this dread disease, a nation-wide B. C. G. vaccination campaign was started in 1952. By the end of 1955-56 more than 70 million people had undergone tuberculin tests and 24·5 million had been vaccinated. By the end of the second Plan it is hoped to cover the entire susceptible population below 25 years of age.

Other diseases which are being vigorously tackled are leprosy and venereal diseases. Water supply and sanitation programmes are checking the incidence of diseases like cholera, typhoid and dysentery. In Madras, Madhya Pradesh and Andhra States an anti-yaws campaign has been launched.

FAMILY PLANNING

An important factor retarding economic growth in India is the rapid increase in the country's population. Because of this, stress is being increasingly laid on family planning. In order to build up an active public opinion in favour of family planning, and to give advice, clinics have been set up both in the urban and rural areas. At the same time, demographic as well as medical and biological studies have been undertaken. About 300 urban and 2,000 rural family planning clinics will be set up in the course of the second Plan.

Considerable help has been given by U.N. organizations, particularly W. H. O. and U.N.I.C.E.F., for the improvement of public health in India. Assistance has been given in fighting malaria, yaws and filaria and in the B.C.G. campaign. Training institutions have been strengthened, drugs and food supplied and fellowships given for training abroad. A recent development is a new programme of health services in community development areas under the auspices of U.N.I.C.E.F.

CHAPTER XIV

LABOUR

According to the latest figures that have been collected, the main fields in which labour is employed are as follows:

Factories	2,977,000
Mines	566,000
Plantations	1,228,000
Railways	957,000
Posts and Telegraphs	243,000
Tramways	171,000
Major Ports	570,000

When India achieved freedom the relationship between capital and labour was not altogether happy. In the serious economic situation arising out of the war, employers were bent on rationalization as a way out of their difficulties. Labour, on the other hand, hard hit by rising prices and the increased cost of living, was demanding larger wages and a larger share of profits. These conflicting interests led to strained relations at a time when the nation required their maximum co-operation in the effort to tide over the economic crisis.

Accordingly, one of the first acts of the new Government was to convene a tripartite conference of employers, workers and representatives of the Government. This conference passed the Industrial Truce Resolution which, while recognizing the legitimate rights of labour, called upon employers and workers to co-operate in industrial activity by avoiding strikes and lock-outs for a period of three years. It also suggested mutual discussions as a method of settling disputes. This Resolution was accepted by the Government in April 1948. A Central Advisory Council for Labour was then constituted and a number of tripartite bodies set up for various industries to resolve disputes.

With the start of the first Five Year Plan co-operation and cordial relations between employers and workers became more than ever necessary. It was also realized that only if workers were well fed, clothed and housed, had adequate health services and were assured a degree of social security could morale and efficiency be high enough for them to perform their allocated tasks in the Plan. Now that the second Plan has started and the tempo of industrial activity is greatly increasing, even more care is being taken that workers get a fair deal so that they can discharge their duties efficiently.

INDUSTRIAL RELATIONS

Beginning with the Industrial Truce Resolution, the co-operation of employers and workers has been secured in ever increasing measure in recent years. Among the tripartite organizations set up following the Truce Resolution are the Indian Labour Conference, the Standing Labour Committee and various Industrial and Advisory Committees. Under the Industrial Disputes Act of 1947, the Central and State Governments have issued orders requiring industrial establishments employing 100 workers or more to establish works committees. Other measures which have helped are the co-opting of labour representatives on the Development Committee where labour matters are discussed, the constitution of a Joint Consultative Board in 1951 and the establishment of the Central Industries Advisory Council, on which both employers and workers are represented. There is also an all-India body called the Central Conciliation Machinery. The States have their own conciliation arrangements.

When conciliation fails, disputes are referred to industrial tribunals for adjudication. There are two Industrial Tribunals, one at Dhanbad and the other at Calcutta, besides smaller tribunals in the States.

Trade Unions

The Government recognizes the right of workers to freedom of association and collective bargaining. It has therefore attempted to foster a strong, responsible and self-reliant trade union movement.

The Indian Trade Unions Act of 1926 was amended in 1947. This amendment, which provided for compulsory recognition of unions and laid down certain measures against unfair practices, has been held in abeyance while the Government is formulating a policy which will enable the unions to depend more on their own organized strength and power of collective bargaining than on government help. The Government is also of the view that there should be a single bargaining agent for the workers in a particular unit. Division into two or more unions, often hostile to each other, weakens the workers' position, it is felt.

The following table shows the growth in membership of registered trade unions:

Year	No. of unions	No. of unions submitting returns	Membership of unions submitting returns
1946-47	1,725	998	1,331,962
1948-49	3,150	1,848	1,960,107
1951-52	4,623	2,556	1,996,311
1952-53	4,909	2,718	2,099,007

The Indian National Trade Union Congress, formed in 1944, is now the largest representative organization of Indian workers. The Hind Mazdoor Sabha, the All-India Trade Union Congress and the United Trades Union Congress are the other large workers' organizations.

WAGES AND SOCIAL SECURITY

The Indian Constitution lays down that the State should endeavour to secure for all workers a living wage. On the wages a worker receives depends his standard of living. In an under-developed economy such as India's it has not been possible to secure a living wage for everyone all at once. However, a Minimum Wages Act, passed in 1948, requires the State and Central Governments to fix minimum wages in certain scheduled industries where low wage rates prevail and the workers are not organized well enough to press their demands. It also applies to agricultural labour.

In the first Plan it was felt that the primary consideration in drawing up a wage policy should be the reduction of disparities to the minimum. This move is of added significance during the second Plan in view of the country's declared objective of a socialist pattern of society. Under the Industrial Relations Act of 1946 wage boards have been set up in Bombay to standardize wages in cotton and silk factories. A Central Wages (Standardization) Board has also been set up for prescribing minimum standard wages for the cement industry.

The Payment of Wages Act, 1936, ensures the regular payment of wages to workers receiving Rs 200 per month or less. The Act applies at present to railways, mines, factories, plantations, some transport services in the States and other establishments.

Social Security

Apart from the question of wages it is recognized that to get the best out of a worker he must be relieved of anxieties arising from the various risks to which he is exposed. For instance, he may fall sick or meet with an accident or even suddenly lose his job. All advanced countries now have social security schemes to protect workers against unforeseen troubles of this sort.

In India, some of these benefits have been afforded by the Workmen's Compensation Act, 1923. There have also been Maternity Benefit Acts for women workers in existence in several States. Replacing these and now in force over a large part of the country is a more comprehensive piece of legislation—the Employees' State Insurance Act, 1948. This Act, which applies in the first instance to factories using power and employing 20 or more persons, confers a variety of benefits on workers receiving Rs 400 per month or less. The Employees' State Insurance Fund receives contributions from employers and employees and grants and donations from the Government, local authorities and private organizations and individuals. The workers' contributions are kept reasonably low. Employers all over India contribute a small percentage of their total wage bill, and those in areas where the scheme is in force pay something more.

About 1,100,000 workers in 40 industrial centres have so far been covered by this scheme. Under a recent amendment, their families also benefit. It is intended to eventually enforce the Act throughout the country, affording protection to 2¼ million workers and their families.

Another important social security measure is the Employees' Provident Funds Act of 1952. This scheme was originally applied to establishments employing 50 or more persons in the cement, cigarette, engineering, iron and steel, paper and textile industries. The worker's contribution is one anna in the rupee of his total emoluments. The employer pays an equal amount.

The scheme has been extended to 17 additional Industries. These include printing presses, heavy and fine chemicals, tea, sugar and glass. Nearly 2 million workers in 3,600 factories now benefit under the Act.

There are special provident fund and bonus schemes for coal miners. In fact, the decision to introduce the Employees' Provident Funds Scheme was influenced largely by the success of the earlier scheme for miners, which was introduced in 1948. The Coal Mines Provident Fund Scheme provides for a contribution of about 1/16th of his earnings by miner, his employer contributing a like amount. The Fund already has a membership of 325,000 in about 900 collieries. Before a miner can qualify to be a member of the Fund he has to earn a bonus by regular attendance. These provident fund and bonus schemes have done much towards establishing a regular labour force in this important sector, which used to be notorious for casual employment.

WORKING CONDITIONS

The main laws regulating working conditions are the Factories Act, 1948, the Indian Mines Act and the Plantations Labour Act.

The Factories Act applies to establishments using power and employing 10 or more workers. It also applies to those which do not use power but employ 20 or more workers. The Act compels employers to take steps for the safety, health and welfare of workers. Some of the provisions relate to hours of work, leave, holidays with pay and occupational diseases. Regular inspections ensure that working conditions in factories are up to standard.

The Mines Act has similar provisions. The Department of Mines has been reorganized to bring about stricter supervision. Medical facilities in mines are also being improved.

A National Museum of Industrial Health, Safety and Welfare, forming part of the Central Labour Institute at Bombay, will play an important part in setting standards of working conditions. The Institute is also to include an Industrial Hygiene Laboratory, a Training Centre and a Library-cum-Information Centre.

PLANTATION LABOUR

Judged by the capital invested, the value of production and the number of workers employed, plantations are among the biggets organized industries in India. The Plantations Labour Act, passed in 1951, aims at regulating conditions of work in plantations. It requires employers to provide medical facilities, housing, annual leave with pay, etc. The Industrial Disputes Act has been amended to extend lay-off benefits to these workers. Various welfare schemes have been introduced in tea gardens and other plantations.

AGRICULTURAL LABOUR

As farming in India is practised on something like a family pattern it is difficult to apply effective legislation in this sector. The only labour legislation extended to landless agricultural workers so far has been the Minimum Wages Act.

Lack of precise information has been another drawback. In 1950-51, however, a sample agricultural labour enquiry was conducted in 800 villages. Much useful information was gathered. A fresh and more comprehensive enquiry is now planned as a preliminary to further government action to improve the lot of farm workers.

The Government has appointed welfare officers at the major ports to look after the interests of dock workers. Provident fund schemes have also been drawn up for them. For seamen, the Government runs clinics, tea stalls and canteens. A new hospital for dock workers was recently opened in Calcutta.

WELFARE AND HOUSING

The Central laws relating to factories, mines and plantations included provisions for amenities at work sites. These relate to canteens, creches, medical aid, drinking water and sanitary facilities. There are, however, two Acts—the Coal Mines Labour Welfare Fund Act, 1947, and the Mica Mines Welfare Fund Act, 1946—which are concerned exclusively with the question of welfare in their respective fields. Established from the proceeds of duties on the despatch of coal and export of mica, these funds are utilized to finance special welfare measures like medical aid, housing and water supply for coal and mica miners.

Four regional hospitals-cum-maternity centres for coal miners have been functioning since 1948. A Central Hospital was opened at Dhanbad in 1951 and another at Asansol in 1955. Two T.B. clinics have been started at Katras and Searsole. There is also a blood bank at Asansol. A number of multi-purpose welfare centres in the coalfields provide educational, recreational and other facilities. There are also special welfare centres for women, where instruction is given in spinning, knitting, domestic economy, etc.

Particular importance is given by the Fund to housing. A revised subsidized housing scheme has recently been introduced to encourage construction. Under its terms, colliery owners get a subsidy of 25 per cent and a loan equal to 37½ per cent of the cost of building. It has been decided that the Coal Mines Welfare Fund should undertake the direct construction of 30,000 houses.

The activities of the Mica Mines Labour Welfare Fund cover mines in Bihar, Andhra and Rajasthan. There is a Central Hospital for mica miners at Karma (Bihar) as well as dispensaries and maternity welfare centres. Education, as well as the running of stores, shops, mobile cinemas and the provision of recreational facilities are financed out of the Fund. The housing scheme is similar to that for coal miners.

Subsidized Housing Scheme

Apart from the housing schemes for miners, there has been a general Subsidized Industrial Housing Scheme in existence since 1952. Under this scheme, State Governments get a subsidy to the extent of 50 per cent of the approved cost of workers' houses to be built by them and the rest as a loan. Employers and workers' co-operatives obtain 25 per cent of the approved cost as a subsidy. Employers get an additional 37½ per cent of the cost as a loan but workers' co-operatives get 50 per cent as an added inducement. Altogether, the construction of 77,000 units was approved under the scheme during the first Plan period. Of these, about 34,000 units were completed, the bulk of them by the State Governments.

EMPLOYMENT AND TRAINING

The National Employment Service was established in 1945 and did very good work in the resettlement of ex-servicemen. In 1947 its scope was extended to cover displaced persons. Later its services were made available to everyone, employer and employment-seeker. By serving as a pool of employment-seekers from which recruitment can be made speedily, the employment exchanges are fulfilling an important role. At present there are 138 exchanges in the country.

The Training and Employment Services Organization Committee, set up in 1952, recommended the transfer of control of the employment service from the Central Government to the States. This has now been done. The Government of India will, however, continue to pay 60 per cent of the cost of the organization and will have certain limited responsibilities. During the second Five Year Plan it is proposed to double the number of employment exchanges. A special Youth Employment Service is to be started in the big towns.

Training

Since the National Employment Service was introduced, training has always been given its due importance. The early schemes aimed at providing technical and vocational training to ex-servicemen. Later they were extended to displaced persons, to adult civilians in 1950 and, finally, they were converted to the training of craftsmen.

The object of the Craftsmen Training Scheme is to provide a steady flow of skilled workers for industry while at the same time reducing unemployment among educated youth. At the end of 1955 training was being imparted in 29 technical trades and 18 vocational trades, and was provided at 60 centres. Some of these schemes were for training displaced persons and women. Altogether about 10,000 persons are being trained at a time in these centres. This number is to be raised to 30,000 during the second Plan. There are evening classes for workers, and hobby training centres are being organized to bring out the technical aptitudes of young people.

To impart specialized training to instructors at these technical centres, a Central Training Institute has been established at Koni-Bilaspur in Madhya Pradesh. A six-month course and a refresher course of shorter duration are provided.

One difficulty that has stood in the way of the improvement of technical skills has been the absence of acceptable standards of training and certification. The Training and Employment Services Organization Committee therefore suggested the setting up of a National Trade Certification Board to bring about uniformity in standards, methods of examination and issue of certificates. The Government has accepted this recommendation.

PRODUCTIVITY

The services of five I.L.O. experts were secured in 1952 for organizing productivity studies in selected industries and introducing improved systems of payment by results. By experiments in the cotton textile and engineering industries these experts were able to show within six months that startling improvements could be achieved by training local staff in productivity techniques.

A National Productivity Centre has now been set up at Bombay, and will form part of the Central Labour Institute. This centre will train officials and employers' and workers' representatives, who will in turn impart training to persons in various industries. In this way the productivity of labour is certain to improve rapidly.

Another scheme which will help to increase the productivity of labour is that entitled Training Within Industry. Its aim is to develop in supervisory staff in industrial establishments (a) skill in leading, (b) skill in instructing and (c) skill in improving methods. Here again, the programmes have been organized with the aid of I.L.O. They are to be extended to various centres throughout the country during the second Plan.

CHAPTER XV

SOCIAL WELFARE

Apart from the general organized social services in the spheres of education, health, housing, labour welfare, etc., there are a large number of specialized activities connected with the uplift of the weak, the neglected and handicapped sections of society to which the term "social welfare" is usually applied. In the past, social welfare has been carried on mainly by voluntary agencies or philanthropic individuals. In the welfare State which is being built up in India, however, the burden of social welfare will fall mainly on the local authorities. Meanwhile, the policy is to assist private agencies to enable them to continue their good work.

CENTRAL SOCIAL WELFARE BOARD

Much of this assistance is given through the Central Social Welfare Board and its branches in the States. The Board, which was formed in August 1953 as part of the first Plan, was given an allocation of Rs 40 million for the first Plan period and Rs 140 million under the second Plan. Apart from disbursing grants to welfare agencies, it acts as a valuable co-ordinating organization for welfare work. It allocates priorities and sanctions grants to deserving institutions actively engaged in the welfare and rehabilitation of women, children and the handicapped. All grants to welfare institutions are on a matching basis, the receiving agency being under an obligation to find an amount equal to the grant by the Board in cash, services or kind.

An important activity of the Board is the organization of Welfare Extension Projects in the rural areas. Each project covers about 25 villages with a total population of 20,000 to 25,000. Generally the Board pays half the cost of running the welfare projects, the rest being met by contributions from the State Governments, local bodies and private agencies. Apart from the provision of basic medical services for women and children, attention is paid to maternity assistance, public health, literacy and craft training for women and pre-basic instruction for children.

Up to the end of November 1956, 368 of these projects had been set up, and the number is to be increased to 1,320 by 1960-61. The aim is to have four such projects in each district. Shortage of trained personnel is a major hindrance to the expansion of these services. For this reason, the Board proposes to train about 25,000 women as village-level workers, craft assistants and midwives and *dais*. Already about 600 such village-level workers have been trained and another 950 village welfare workers and 250 midwives are under training.

Another scheme, entitled Family Welfare Services, is designed to assist women of lower middle class families in industrialized urban areas by providing gainful spare-time employment in selected small-scale industries. So far, four match factories have been set up on a co-operative basis at Najafgarh (Delhi), Vijayawada (Andhra), Poona and Asifnagar, near Hyderabad.

The other urban welfare scheme which the Board is promoting is the establishment by social welfare agencies of hostels for working women of the middle and low income groups in cities. About 25 such institutions have so far been given grants-in-aid.

The Board pays special attention to the suppression of immoral traffic in women and children and the after-care of victims of this evil. Under the scheme sponsored by it, 80 homes—five in each State and the rest in the Territories—and 330 district shelters—one in each district—are proposed to be set up. Sanction has been given for the starting of nine homes and 27 shelters in four States—Madras, Andhra, Assam and Madhya Pradesh. The scheme provides for the training and rehabilitation of women rescued from prostitution and children discharged from jails and reformatory institutions.

Social welfare programmes are to be considerably expanded in the next five years. In addition to Rs 140 million provided for the Board in the second Plan, the

States are providing Rs. 30 million for after-care and social and moral hygiene programmes and a like sum is to be spent on schemes under the control of the Ministry of Home Affairs.

CARE OF THE HANDICAPPED

A National Advisory Council for the education of the handicapped was formed in 1955 to advise the Government on problems concerning the education, training and employment of the physically and mentally handicapped and to maintain contact with private agencies working in this field. There are at present about 60 schools for the blind, 44 for deaf-mutes, nine for the crippled and diseased and five for the mentally handicapped. These facilities are to be expanded during the second Plan.

OTHER PROGRAMMES

Other social welfare programmes relate to juvenile delinquency and beggars. Legislation dealing with uvenile deliuquency exists in most States, but it is not everywhere enforced adequately. There are three kinds of correctional institutions for young offenders—reformatory schools, borstal schools and certified schools. Generally speaking, the first and last types are for those under 16 years of age, while the borstal schools are meant for older offenders. Formal education as well as vocational training is imparted in these institutions. Some also provide follow-up services.

Though several States have pasesed Acts prohibiting begging in public places, the problem permits no easy, ready-made solution. The problems of preventing beggary and rehabilitating baggars as useful and productive members of society are to receive attention as part of the welfare schemes during the second Plan period. About Rs 50 million is proposed to be spent by the Central and State Governments on schemes for these sections.

PROHIBITION

In the Constitution, prohibition has been laid down as one of the Directive Principles of State policy. A committee appointed by the Planning Commission to suggest ways of overcoming difficulties in carrying out this policy reported in September 1955. It recommended the integration of prohibition with the general schemes of national development and suggested April 1, 1958, as the target date for enforcement throughout the country. While the report is under scrutiny an interim programme designed to curtail facilities for drinking has been evolved by the Planning Commission.

At present there is complete prohibition in only three States—Andhra, Bombay and Madras—and partial prohibition in Assam, Madhya Pradesh, Orissa, Punjab. Uttar Pradesh, Mysore, Kerala and the Territory of Himachal Pradesh. There is no prohibition in the other States but some areas, such as Delhi, have certain restrictions on drinking.

Similarly, active steps to discourage the consumption of opium and other harmful narcotics have been taken since 1949. It is planned to introduce total prohibition in this sphere by 1959.

BACKWARD CLASSES

Mahatma Gandhi visualized a co-operatively governed society of free men. This was the ideal he called Sarvodaya. This aim is laid down in the Indian Constitution, which says that all men are equal and includes the abolition of untouchability as one of the Fundamental Rights. The first Plan made a provision of Rs. 390 million for helping the backward, the needy and the poor to lead better lives. The provision under the second Plan is Rs. 910 million.

Scheduled Castes

Prominent among the backward classes are the 51 million (1951 census) Scheduled Castes—the people who were given the lowest jobs in the stratified Hindu society of long ago. These people were not supposed to have direct contact with those of the higher castes. In other words, they were untouchables. Now, with the enactment, of the Untouchability (Offences) Act, its practice has been made a cognizable offence.

However, no legal measures can immediately put an end to an age-old practice. The provision of opportunities for self-development, expression and betterment for the Scheduled Castes has, therefore, been undertaken side by side with legislative action to make these people full members of society.

Education is the most pressing need of these *Harijans* (literally God's people, as Mahatma Gandhi called them). A good deal has been done by opening primary schools as well as hostels. Assistance is given in the form of free tuition, stipends, scholarships, books, stationery and other equipment. Clothing and mid-day meals are also provided. In several States, these concessions continue up to the university stage.

A fair percentage of government jobs are reserved for Harijan candidates, and rules relating to age, qualifications and experience are relaxed in their favour. While a minimum number of vacancies are reserved for them, there is no bar to their employment in larger numbers.

For Harijans living in the rural areas, the first Plan made a provision for the allotment of waste land and the grant of loans for bullocks and agricultural implements. During the second Plan period, it is proposed to sink 15,200 wells in Harijan colonies as against 4,500 in the first Plan, in addition to 8,200 under a centrally-sponsored scheme. Also, 93,300 houses and sites are to be provided, besides 36,000 houses to be constructed under the Central Government's programme. Under the State plans, more than 80 co-operative housing societies are to be set up.

Under the Central scheme it is proposed to open 166 training-cum-production centres for the training of 33,400 persons in various crafts and trades. The trainees will also receive subsidies to enable them to settle in business. The State plans provide for the training of 7,000 Harijan students.

Finally, provision has been made for granting freeships and scholarships to more than 3 million students, in addition to 107,000 scholarships sponsored by the Ministry of Education. It is also proposed to open 6,000 schools and hostels for Harijan students.

Scheduled Tribes

Tribal people form another backward section of the community. In India there are 18 million *Adivasis* (members of the Scheduled Tribes). Special efforts were made during the first Plan for their welfare. Thus, about Rs. 60 million was present. on building roads in tribal areas in Assam and other States. Special attention was also paid to the education of tribal people. To facilitate teaching through tribal dialects, special text-books were prepared in Assam, Bihar, Hyderabad and the North-East Frontier Agency. Assistance was given to more than 450,000 tribal students in the form of scholarships, books, hostel fees, etc., and as many as 4,000 schools were opened.

In a number of States, new agricultural colonies have been formed. Since 1954, nearly 18 centres have been set up in tribal areas for the demonstration of improved methods of land utilization. In the East and West Godavari districts of Andhra, colonization schemes have been started, and there are similar pilot schemes in Bastar and other tribal districts of Madhya Pradesh. In Orissa, more than 2,000 families have been settled in 69 agricultural colonies.

During the first Plan, 653 forest labour co-operatives, 312 multi-purpose co-operative societies and 350 grain *golas* (banks) were set up in the tribal areas. In a number of States tribal tenants' debts were scaled down and laws enacted to protect their land rights.

To improve the economic condition of these people, 111 cottage industry centres were opened. A start was also made with developing subsidiary industries like bee-keeping, basket-making, sericulture, spinning and weaving, fruit preservation and the manufacture of palm-*gur*.

Health was a major item in the improvement programme for the tribal areas under the first Plan. To fight malaria, tuberculosis, smallpox and venereal and skin diseases 3,144 dispensaries and mobile health units were started. All these betterment measures are being continued in the second Plan.

In view of the special problems of the tribal people in North-East India, the Plan provides more than Rs. 150 million for tribal welfare in Assam, Manipur and Tripura and Rs. 95 million for the North-East Frontier Agency.

Criminal Tribes

Under British rule a number of lawless tribes were classed as "criminal" and were generally segregated. In August 1952, however, the Criminal Tribes Acts were repealed. Special efforts are now being made to rehabilitate these people economically and to educate them so as to wean away the children from anti-social practices.

During the first Plan period, 42,056 students were awarded scholarships and stipends and 291 schools were opened. About 3,600 families were helped with subsidies to settle in agriculture, 113 co-operative societies were organized and 33 cottage industry centres established There are at present 17 settlements and 30 colonies for these tribes.

CHAPTER XVI

TRANSPORT

Before India gained freedom, the dominant considerations in the development of transport were trade and administration. Since 1947, however, the transport system has been increasingly oriented to serve the needs of economic development. This is clearly illustrated in the second Plan, where the allocation for transport and communications is Rs. 13,850 million or about 29 per cent of the total outlay in the public sector of the Plan.

RAILWAYS

The principal means of land transport in India is the railways. With a route mileage of 34,705 on March 31, 1956, the Indian railway system is the largest in Asia and fourth in size in the world. It is estimated that 80 per cent of goods and 70 per cent of passenger traffic in inter-regional movement in the country is carried by rail. The total investment exceeds Rs. 10,000 million and more than a million people are employed by this, the largest national undertaking.

Unfortunately, the railways are not without their troubles. For over a decade before the first Plan began they underwent severe strain as a result of the war and the partition of the country. Resources were severely depleted and replacements of rolling stock and other equipment fell far behind schedule. The railway programme in the first Plan had, therefore, to be directed primarily towards rehabilitating the system. Only now is it possible to really go ahead with expansion, although the rehabilitation phase is far from complete.

The first important post-independence development in this sector was the regrouping of the railways into seven major zonal systems. This has ensured greater co-ordination and uniformity in operational working. Steps have also been taken to make the railways self-sufficient to a large degree. A locomotive factory has been built at Chittaranjan in West Bengal. Arrangements have also been made with the Tata Engineering and Locomotive Company to manufacture locomotives for the metre-gauge railways. A factory has been built at Perambur, Madras, to manufacture light-weight steel coaches of the integral type, while the Hindustan Aircraft Factory at Bangalore has also undertaken coach-building. Wagon production, too, has been trebled in the past few years.

The Chittaranjan Works produced its first locomotive in 1950, its 100th in January 1954 and its 400th in August 1956. The Perambur Factory, which has a target capacity of 350 coaches a year, went into production in October 1955.

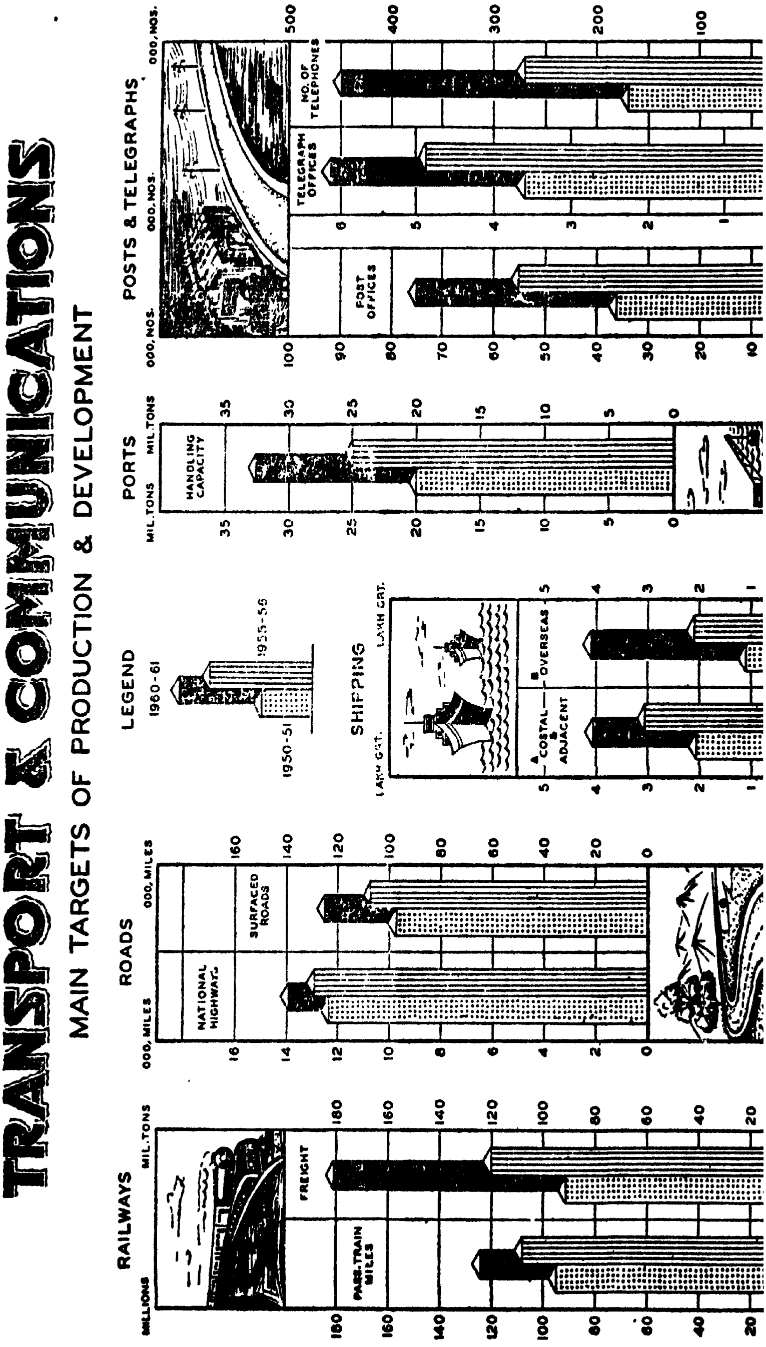
The following table gives an idea of the extent of procurement of engines, coaches and wagons during the first Plan:

	Indian manufacture	Imports	Total procured
Locomotives	496	1,093	1,589
Coaches	4,351	486	4,837
Wagons	41,192	20,521	61,713

Internal production has now reached a stage when it is able to meet the railways' normal requirements of wagons and coaches. When the Chittaranjan and Tata factories are in full production self-sufficiency will also be attained in the matter of normal needs of locomotives.

Other items which received attention during the first Plan were the construction of new lines, rehabilitation of obsolete track, passenger amenities, electrification in selected areas and the improvement of workshops as well as other structural and engineering works.

In the second Plan the rehabilitation programme is to be continued, but the accent is now more on expansion to meet the greatly increased needs of agriculture and industry as the heavy programmes of development get under way. It is estimated that the railways will have to carry


TRANSPORT & COMMUNICATIONS
MAIN TARGETS OF PRODUCTION & DEVELOPMENT
RAILWAYS
MILLIONS
MIL.TONS
PASS.TRAIN MILES
FREIGHT
180
160
140
120
100
80
60
40
20
ROADS
000, MILES
NATIONAL HIGHWAYS
SURFACED ROADS
16
14
12
10
8
6
4
2
0
160
140
120
100
80
60
40
20
0
LEGEND
1960-61
1955-56
1950-51
SHIPPING
LAKH GRT.
A COSTAL & ADJACENT
B OVERSEAS
5
4
3
2
1
PORTS
MIL.TONS
HANDLING CAPACITY
35
30
25
20
15
10
5
0
POSTS & TELEGRAPHS
000, NOS.
POST OFFICES
TELEGRAPH OFFICES
NO. OF TELEPHONES
100
90
80
70
60
50
40
30
20
10
6
5
4
3
2
1
500
400
300
200
100

about 180 million tons in 1960-61 as against 114 million tons estimated to have been carried in 1955-56. This will entail heavy additions to rolling stock and other equipment, expansion of line capacity and remodelling of workshops and structural works. Altogether the Plan provides Rs 11,250 million for the railways, including about Rs 2,250 million representing contributions to the Railway Depreciation Fund.

ROADS

At the beginning of the first Plan India had 97,000 miles of metalled roads and about 147,000 miles of unmetalled roads. The Plan ropvided more than Rs. 1,000 million for road-building, and as a result about 10,000 miles of new surfaced roads and about 20,000 miles of low-grade roads came into existence.

Under the Constitution, national highways and certain selected roads of strategic or other importance are the Centre's responsibility while the State highways and district and village roads are cared for by the State Governments

National Highways

The total milage of national highways is about 13,800. The longest highway is the Grand Trunk Road from Calcutta to Amritsar, a distance of 1,500 miles. When responsibility for these roads was taken over by the Central Government from the States in 1947 there were long stretches of missing links and scarcely any bridges over the main rivers encountered. In the first Plan this need received special attention. About 640 miles of link roads and 40 major bridges were completed, besides the improvement of 2,500 miles of existing highway.

An important work begun was the construction of a tunnel at Banihal on the road to Srinagar to provide an all-weather road between Kashmir and India. This tunnel will consist of two tubes, each for single-lane traffic. One tube is open to traffic and the whole work will be completed by April 1958.

In the second Plan, as in the first, the national highways programme will consist mainly of the construction of links and bridges and the improvement of existing roads. A special programme of inter-state roads and others of economic or tourist importance, taken up in 1954, is to be continued.

In the States' road plans, the construction of about 18,000 miles of surfaced roads will be taken up, besides a large programme of village roads chiefly in areas covered by the National Extension Service. Altogether it is proposed to spend Rs. 2,460 million on road development. In addition, Rs 250 million will be provided from the Central Road Fund, which gives grants to the States for road-building. The Fund was constituted as far back as 1929.

Road Transport

As an alternative means of carrying goods, road transport is important to India's development plans. There are about 48,000 motor transport operators, of whom 46,000 are small operators owning five vehicles or less. These small operators are being encouraged to form viable units.

Under the Road Transport Corporations Act, 1950, statutory transport corporations are being formed on a tripartite basis by the State Governments, the railways and private operators. State-operated services, mainly providing passenger transport, now exist in most States.

INLAND WATER TRANSPORT

Ton for ton, mile for mile, it is cheaper to transport goods by water than by rail. The length of Indian waterways navigable by mechanically propelled country vessels or large country boats is more than 5,000 miles. The more important waterways are the rivers Ganga, Brahmaputra, Godavari and Krishna, the backwaters and canals of Kerala, the Buckingham Canal and the west coast canals of Madras and Andhra States and the Mahanadi canals in Orissa. A Ganga-Brahmaputra Water Transport Board was set up in 1952 under the first Plan. The second Plan makes a provision of Rs. 30 million for such measures as depening channels to enable these waterways to be used by modern power craft.

SHIPPING AND PORTS

With a coastline of more than 3,500 miles, India has a thriving overseas trade. It is only since 1947, however, that a start has been made in developing shipping services. The coastal trade is now carried entirely in Indian vessels, but the position as regards over-seas trade is far from satisfactory.

The growth in Indian tonnage has been rather slow in spite of government aid by way of loans to shipping companies. In 1950-51, it was about 390,000 GRT. By the end of the first Plan it rose to about 500,000 GRT. In the second Plan it is hoped to raise the tonnage to 900,000 GRT. It should then be possible for Indian shipping to carry 12 to 15 per cent of the country's overseas trade and 50 per cent of trade with neighbouring countries.

The Vishakhapatnam shipyard was bought from the Scindia company in 1952 and entrusted to the Hindustan Shipyard Ltd., in which the Government has a controlling interest. The shipyard is producing modern "Maierform" design ships as distinct from the old "Jala" type vessels made earlier. Its capacity is now four ships of the new type per annum. During the second Plan a dry dock is to be built at Vishakhapatnam. It is also proposed to undertake preliminary work towards the establishment of another shipyard, such as selection of a site and training of personnel.

Ports

India has six major ports—Calcutta, Bombay, Madras, Cochin, Vishakhapatnam and Kandla. The last-named has only recently been developed in order to make good the loss of Karachi when Pakistan was formed. The first Plan provided Rs 120 million for the development of Kandla, including an allotment for the new displaced persons township of Gandhidham. It also made allocations for improvements to be effected at the other major ports.

The ports of Bombay, Calcutta and Madras are administered by statutory port authorities, subject to the over-all control of the Central Government. The ports of Cochin, Vishakhapatnam and Kandla are administered by the Government itself. The Port Trusts and Ports Act ensures uniformity in port administration. Together, these six major ports had the capacity of handling 26 million tons of cargo per annum at the end of 1955-56. This is expected to increase by 30 per cent as a result of improvements to be made during the second Plan.

Besides the major ports there are a large number of smaller ports handling a total traffic of about 500,000 tons.

CHAPTER XVII

COMMUNICATIONS

The rapid development of the national economy since independence has necessitated a constant effort to expand and improve the services which are grouped together under the Ministry of Communications. These include the posts and telegraphs, civil aviation, meteorology and overseas communications services.

POSTAL SERVICES

In the Posts and Telegraphs Department, the underlying policy has been to bring modern means of organized communication within the reach of the largest number of people, especially those in the rural areas. It has been the aim to provide a post office for every group of villages within a radius of two miles and covering a total population of 2 000 or more, provided that the nearest post office is not less than three miles away and the loss incurred does not exceed Rs 750/- per annum. In addition, post offices are provided at all places where these are expected to be self-supporting, as well as at the headquarters of administrative units.

As a result of this policy, the number of post offices has been more than doubled since independence. As against 22,116 post offices in the country on August 15, 1947, there were 36,094 post offices on March 31, 1951, and the figure had risen to more than 55,000 by the end of the first Five Year Plan.

Good progress has been made in the delivery of mail. The cities of Bombay, Calcutta, Madras, Nagpur and Delhi have been linked through an inland night air mail service, which has resulted in a big reduction in the transit time of mail.

Mobile post offices have been opened in cities connected by the night air mail. The frequency of delivery of mail in the rural areas has also been stepped up, with the result that there are now only 40,000 places in the country where mail is delivered once or less than once a week, as against 170,000 such places in 1953.

TELE-COMMUNICATIONS

One of the primary objectives of the first Plan was the extension of telegraph and telephone facilities to the rural areas. It was decided to extend telegraph facilities to all district towns irrespective of the loss involved, and to provide for the opening of telegraph offices at all sub-divisional and *tehsil* (a smaller administrative unit) stations, subject to the aggregate loss being within certain limits.

A similar policy was decided upon in the matter of telephone facilities. It was decided that telephone exchanges be opened at district headquarters and that trunk public call offices be opened at sub-divisional towns, subject again to the aggregate loss being within certain limits.

The total number of telegraph offices in the country has increased from 3,592 at the beginning of the first Plan to 5,057 at the end of 1955-56—an increase of 1,465. Nearly 850 telegraph offices now handle telegrams in the Devanagri (Hindi) script.

From a meagre 338 long-distance public call offices in 1953, the number has gone up to 1,254. Three hundred and forty-seven new exchanges have been opened.

Nearly 110,000 telephones were provided during the first Plan, representing an increase of 63 per cent in the number of telephones in use in the country. The channel milage increased by nearly 45,000, registering thereby a substantial increase in the capacity of the trunk telephone system. Additional physical trunk circuits were erected between various stations, and a noteworthy development was the start on an underground trunk cable which will eventually link Delhi, Bombay and Calcutta and provide a first-rate service.

On the telegraph side, new modernization proposals include the introduction of tape relay systems and teleprinter exchanges in the big cities as well as the gradual replacement of the Morse system.

Overseas Communications

The growing importance of India in the comity of nations has been reflected in the rapid expansion of telecommunication services with other countries. At the beginning of the first Plan, direct wireless services were operated only to the U.K., the U.S.A., Australia, China, Afghanistan and Japan. By the end of the Plan, however, direct radio telegraph circuits had been established with 12 countries, radio-telephone circuits with 16 countries and radio-photo circuits with five countries. The second Plan envisages further extension of these facilities.

To sustain the expansion of the tele-communication services, the Union Ministry of Communications is progressively increasing the manufacture of equipment within the country. This is done at the telephone factory at Bangalore, set up in 1948, and in P. & T. workshops. The telephone factory achieved a production capacity of 50,000 telephone instruments and 35,000 exchange lines by the end of the first Plan.

CIVIL AVIATION

One of the major developments in civil aviation in India in recent years has been the nationalization of the internal and external air services, which are run by two statutory corporations—Air India International and the Indian Airlines Corporation. The internal air services now cover most of the big towns. The external services reach out to Cairo, Beirut, Rome, Damascus, Prague, Dusseldorf, London, Zurich, Geneva, Paris, Hong Kong, Bangkok, Singapore, Karachi, Aden, Kabul, Kandahar, Rangoon, Colombo, Nairobi, Tokyo, Darwin and Sydney.

Under the second Plan, a provision of Rs 305 million has been made for the two corporations. Their fleets are to be modernized. The I.A.C. placed orders for five Viscounts during the first Plan. Orders have also been placed for five additional Viscounts for delivery in the first half of 1958. For Air India International, the programme includes the purchase of three jet aircraft. In keeping with the expansion of the air services, ground facilities have also been increased. During the first Plan the number of aerodromes under the control of the Director-General of Civil Aviation increased from 72 to 81. A comprehensive programme for the provision of a high-grade telecommunications service was also taken in hand.

Through scholarships, grants to flying clubs and encouragement of gliding, the Government of India is fostering airmindedness in the country. There are 12 subsidized flying clubs, three government gliding centres and a subsidized gliding club.

METEOROLOGY

The weather services play a crucial role in transport and communications, especially in regard to aviation and shipping. It has been the endeavour of the Meteorological Department to provide a first class weather information service for these interests.

Among the other important activities of the Department, mention may be made of the work done in collaboration with the Central Water and Power Commission for the establishment of planned networks of hydro-meteorological observatories in the catchment areas of important rivers. They will collect data on rainfall and other meteorological factors for river valley and flood control projects.

For the first time in India, the compilation of an Indian Ephemeris and Nautical Almanac has been undertaken. The modernization of equipment and extension of departmental workshops and laboratories, which received considerable attention in the first Plan, are to be continued. One of the new proposals concerns the establishment of a Central Astronomical Observatory. Work on this will be started during the second Plan.

CHAPTER XVIII

REHABILITATION

The most difficult of the many urgent problems that confronted the national Government in 1947 was the rehabilitation of displaced persons from the areas now under Pakistan. By the end of 1956 about 8.72 million persons had arrived from across the borders, 4·72 million of them from West Pakistan. While the influx from West Pakistan has come down to about 4,000 per annum in recent years, that from East Pakistan continues to present a major problem.

For the purpose of setting these displaced persons on their feet, a special Ministry of Rehabilitation was formed at the Centre. Assistance to displaced persons was given by way of housing, education, vocational and technical training and loans for starting businesses and industries. Agriculturists were allotted land and given loans to enable them to resume their occupation. Those who left urban immovable properties in West Pakistan were given compensation on a system of graded cuts. Industries were set up in townships and colonies to provide employment for displaced persons. By the end of 1956-57, a total amount of Rs 3,461·9 million had been spent on these programmes.

DISPLACED PERSONS FROM WEST PAKISTAN

At first, large relief camps were organized in several States. With the progress of rehabilitation most of these camps have been closed, but about 22,000 unattached women and children and the aged and sick are still cared for by the State. About 17,000 displaced persons who were unable to make a living for themselves were given maintenance allowances against immovable property left in Pakistan until they received compensation.

So far, nearly 2·9 million displaced persons from West Pakistan have been resettled on land. As an aid to resettlement, about 155 urban colonies and townships have been built. The State Governments have advanced loans (up to Rs 5,000 per family) to those interested in setting themselves up in small industries, trade or professions. Larger loans have been disbursed by the Rehabilitation Finance Administration. Vocational training centres, too, have been established and about 80,000 persons have so far been trained. Other ways in which displaced persons have been helped are through scholarships and other educational concessions and special facilities in regard to employment.

As no agreement could be reached with Pakistan on the question of immovable property left by displaced persons, the Government of India decided in May 1954 to acquire title to evacuee property left in India and to utilize this for payment of compensation. The scheme has been so devised as to give a larger percentage of compensation to smaller claimants. Up to the end of January 1957, 156,000 claimants out of a total of 450,000 had received compensation amounting to Rs 480·7 million.

DISPLACED PERSONS FROM EAST PAKISTAN

The influx from East Pakistan has, unfortunately, continued. So far, about 4,005,000 persons have migrated, of whom more than 500,000 families have been resettled in West Bengal and the neighbouring States. The problems of resettlement here are somewhat different to those in the north-west. In respect of housing, for instance, though some townships have been set up, the general policy has been to provide loans and building sites and to leave the actual construction largely to the displaced persons themselves. About 370,000 houses have been constructed this way. Technical and vocational training centres have also been set up and business loans advanced to about 101,000 families.

SECOND PLAN

The first Plan provided a total outlay of Rs 1,360 million for rehabilitation. The amount provided in the second Plan is less—Rs 855 million—due to the fact that the larger part of the task of resettling displaced persons from West Pakistan has been completed. Items still needing attention are housing schemes and those for mitigating unemployment in the new colonies and townships. It is also essential to continue the training and education schemes.

The bulk of the allocation in the second Plan period will be devoted to the needs of displaced persons from East Pakistan. Larger funds may have to be provided later if the migration continues at a high rate.

All the assistance programmes begun earlier, such as loans, housing, training, education and employment facilities and the setting up of industries are to be continued in the second Plan. The rehabilitation schemes are increasingly being co-ordinated with the general economic and social programmes in the States where the displaced persons have found new homes.

CULTURAL

CHAPTER I

FESTIVALS

Ranging from austere fasts to exuberant fairs, the festivals of India are as varied and colourful as its people. Hinduism, Islam and Christianity are the three most widely professed religions, and since each has its own particular observances and celebrations, the total number of festivals is very large. Among the Hindus alone, there are about 70. Only a few, however, are widely observed.

Hindu festivals are of four kinds; the festivals proper, *vratas* (fasts), *jayantis* (birthdays) and *melas* (fairs). As a rule, they commemorate events of moral and spiritual significance in the lives of the gods and goddesses of mythology as well as legendary heroes and heroines. Also, certain positions and conjunctions of the planets give certain days a sacred character, *e.g.*, the *Puranmashi Vrata* (Fast of the Full Moon), which comes once a month.

The more important Hindu festivals are Diwali, Basant Panchami, Rakshabandhan, Dusserah and Holi.

DIWALI

Deepavali or Diwali, the festival of lamps, is one of the most popular. It usually falls in October, the date varying from year to year, and celebrates the homecoming of Rama, the hero of the epic *Ramayana*, after he had defeated the demon king Ravana. Diwali is an occasion for great rejoicing. A few days before the festival, houses are whitewashed, rubbish is disposed of and furnishings renovated. On Diwali morning, every household is up and about very early and people put on new clothes. Visits are exchanged between friends and relations and gifts given and taken. In the evening, rows of earthen lamps are lit on every house-front and roof-top.

People go out into the bazars, shopping for presents. Children buy crackers, squibs, catherine wheels and other fire-works.

In the evening, the family gathers in the best room of the house and performs the Diwali *puja,* when prayers for success and prosperity are offered to Lakshmi, the Goddess of Wealth.

Bengalis devote this day to Kali *puja.* The South has a different tradition.

BASANT PANCHAMI

Basant Panchami marks the first day of spring. In spring new leaves appear, the bud blossoms and all living things come to fruition. This exuberance in the world around and in the hearts of men is celebrated in a fitting manner. Everyone wears yellow. Men tie yellow turbans and women don yellow *dupattas* or *saris.* Children fly yellow kites. It was on this day, according to legend, that Siva reduced Kamdeva, the God of Love, to ashes with one glance from his omnipotent third eye.

Bengalis, who worship Saraswati, the Goddess of learning, on this day, take out an image of the goddess in procession and immerse it in the river.

RAKSHABANDHAN

Rakshabandhan, or Rakhi, commemorates the occasion when Sachi, the wife of Indra, tied a sacred thread round her husband's wrist after he had been defeated by the *asuras* (demons). This amulet gave him added strength and power so that he returned to the fight and triumphed.

On this day, a sister ties an amulet of coloured thread round her brother's wrist while reciting *mantras* (prayers). The sister then presents the brother with sweets. He reciprocates by giving her a present in cash. The amulet is supposed to give the wearer strength to ward off evil influences. In the ceremony of Rakshabandhan, the sister symbolically places her honour in her brother's keeping and he in turn pledges to protect her.

DUSSERAH

The Dusserah celebrations take different forms in different parts of the country. In North India, episodes from the *Ramayana* are staged for a few nights preceding Dusserah. Each quarter of the city erects its own makeshift stage, while local residents make up the cast. On the evening of Dusserah a big fair is held and large effigies of the demon king Ravana and his minions are burnt amidst great jubilation.

Dusserah in South India is a nine-day festival, during which every house is decorated with tiers of little clay dolls representing various divine and lay figures. In the evening visits are exchanged and everyone keeps open house. On the ninth day, *puja* is offered to the Goddess Saraswati. The worship of tools and implements for different occupations forms part of the ritual.

Mysore is famed for its Dusserah festivities. In Bengal, this festival is called Durga Puja. It is spread over four days, at the end of which an image of the Goddess Durga, seated on a lion and flanked by the Gods Kartik and Ganesh, sons of Siva, is taken out in procession and immersed in the river. This ceremony symbolizes the homecoming of Parvati (Siva's consort) and her subsequent return to her Lord. Durga Puja is the most popular festival in Bengal.

HOLI

Holi, which comes in March, is in celebration of the death of the ogress Holika at the hands of Lord Krishna. It is an occasion for boisterous fun, marked by the squirting of coloured water. In the evening, folk-songs are sung at gatherings round huge bonfires.

KUMBH MELA

Besides, fasts and festivals, there are *melas* or religious fairs. Chief among these is the Maha Kumbh Mela, which is held at Hardwar, Allahabad, Ujjain and Nasik once every twelve years, usually in the months of March or

May. Certain days during this *mela* are considered auspicious for bathing in the river. There is an interesting story about the origin of this festival. The *devas* (*gods*) kept the Nectar of Immortality in a vessel (*kumbh*) and the *asuras* (demons) fought hard for its possession. During the battle, the *kumbh* fell on the earth four times—at Allahabad, Hardwar, Ujjain and Nasik. On the twelfth day of the fighting, Lord Vishnu intervened and brought peace by distributing the contents of the *kumbh* among the deserving.

The *mela* is gigantic. Every devout Hindu who can afford it visits the holy place at this time. The period is devoted to bathing in the river, fasting, prayer and meditation. A unique feature of this *mela* is the famous procession of *sanyasis* (holy men). On this occasion they come out of their seclusion.

MAHAMAHAM

Somewhat similar to the Kumbh Mela of North India is the Mahamaham in the South. This is held at the sacred spot of Kumbakonam. There is a tank here popularly known as Amritavapi. Legend has it that during the third *Pralaya* (Deluge), the seeds for the next cycle of creation were preserved in the Amrita Kumbh. Under the direction of Yogi Kakabhusanda, the pot was closed and sealed with a string. When the deluge swamped the earth, this Amrita Kumbh floated upon the waters. As the flood subsided, the *kumbh* touched the earth at Kumbakonam. It fell at an angle and the cord snapped; the lid fell off and the water flowed out to form the pool known as Amritavapi.

Mahamaham is also a bathing fair and numberless pilgrims assemble at Kumbakonam to have the sacred dip.

MUSLIM FESTIVALS

Muslim festivals, though fewer in number, are celebrated with much zest and enthusiasm. Id-i-Milad, Id-ul-Fitr, Id-ul-Zuha and Muharram are the more important occasions.

Id-i-Milad is the Prophet's birthday and also the anniversary of his death, while Id-ul-Fitr marks the end of Ramzan, the month of fasting. Id-ul-Zuha commemorates the triumph of Hazrat Ibrahim, who was ready to sacrifice his son Ismail at the altar in response to the command of God. These three festivals are celebrated in a similar manner. New clothes are worn and food and sweets are distributed among the poor. Congregational prayers are offered in the mosques and Muslim divines deliver sermons on the life of the Prophet at public and private gatherings.

Muharram is another Muslim festival, but it is observed only by Shia Muslims. It is in memory of the martyrdom of Hazrat Hussain, a grandson of the Prophet. The Shias go into mourning for a period of ten days, at the end of which a symbolic funeral procession is held.

The Christian festivals are too well known to merit description. In India, they are celebrated with great zeal and non-Christians, too, join in the festivities.

CHAPTER II

LANGUAGE AND LITERATURE

The Indian Constitution recognizes 14 languages. Hindi, the language of nearly 42 per cent of the people, has been declared the State language, but for a period of 15 years from 1950 English will continue in official use.

ORIGIN AND GROWTH

The Indian languages have been classified under four heads: (1) Indo-Aryan, (2) Dravidian, (3) Austric and (4) Sino-Tibetan. The Aryan languages are descended from the ancient speech of the Indo-European invaders who came to India from their original homeland in the Eurasian plains. The oldest form of Aryan speech is to be found in the Vedas, the four sacred books of the Hindus, which are believed to have been compiled c. 10th century B.C. Vedic Sanskrit gradually evolved into what are known as the middle Indo-Aryan dialects. Between 600 B.C. and 1000 A.D., the period of Aryan expansion, these dialects gradually spread over northern India. The early literature of Buddhism is enshrined in Pali. By the 10th century A.D., the middle Indo-Aryan dialects gradually developed into the modern Indo-Aryan languages.

The most important of these is Hindi and, on the basis of the numbers who speak it, it is the third most important language in the world after northern Chinese and English. The home districts of Hindi are eastern Punjab and western Uttar Pradesh. It has also come to be accepted as the literary language of the neighbouring areas. Hindi is easily understood by people who speak other Aryan languages such as Bengali, Assamese, Oriya, Marathi and Nepali. It is thus the most representative language of modern India.

Though Delhi is reputed to have been the birth-place of Urdu, it is known that Persian--speaking soldiers settled down in the Punjab 200 years before the first

Muslim Sultan ascended the throne of Delhi. They intermarried and spoke a variation of the local language, heavily interlarded with Persian. The invasions of Mahmud of Ghazni and Mohammed Ghori helped to establish Urdu in Delhi, and within a few years it passed into common speech.

Urdu thus evolved as a result of Persian influence on Hindi and came to be written in Persian characters. It became current in north-western and upper Gangetic India and later in the Deccan.

The Dravidian languages, spoken by 20 per cent of the people, have their home in peninsular India. Tamil, Malayalam, Telugu and Kannada are the most important of them. Tamil, the oldest member of the group, preserves a good deal of the general character and vocabulary of the ancient Dravidian speech; it has a most extensive vocabulary. Malayalam is closely related to Tamil but has borrowed considerably from Sanskrit.

Primitive tribes, constituting 1·3 per cent of the population and living in the forest areas of Bengal and Bihar, speak dialects of their own and, till recently, they did not even have a script. These languages are said to be related to those of south-east Asia. Along with the latter they are described as Austro-Asiatic languages. They are believed to have come to India from the north-east long before the Indo-Aryan invasion.

Sino-Tibetan dialects are spoken by small tribes along the southern slopes of the Himalayas and in north Bengal and Assam. Nawari of Nepal an Meithei or Manipuri of Manipur are the most important. These tribes are now learning Bengali or Assamese and are rapidly becoming bilingual. They constitute 0·35 per cent of the population.

In spite of this variety of languages and dialects in India there is a basic unity underlying them. They bear the influence of a commonly shared culture.

LITERATURE

Among the Indo-Aryan languages, the Vedas are the most ancient collection of hymns and religious writings. They consist of four books, the earliest, the Rig Veda, being older than the Homeric poems.

By about 600 B.C., the old Indo-Aryan language of the Vedas had metamorphosed into Prakrit (as it later came to be known) just as Latin changed to Italian. The Brahman priests continued the study of the old Vedic language and developed a younger form of Vedic speech known as Sanskrit. It soon became the language of the sophisticated, and even if it is not spoken today it has been in use ever since for religious purposes. The two great epics of ancient India, the *Mahabharata* and the *Ramayana*, which assumed their present form about the time of Christ, were written in Sanskrit, as were the Puranas—books on religious and historical traditions. Meanwhile, certain haterodox systems of philosophy were founded by Mahavira (Jainism) and the Buddha. Their followers produced a great mass of literature in Pali and various other dialects. To these must be added the older literature of Tamil, whose earliest specimens date back to the beginning of the Christian era. In Tamil, beautiful poetry was composed under a different inspiration—that of the ancient Dravidian culture.

From the 10th century onwards, Telugu, Kannada and Malayalam developed rapidly and much valuable writing was done in each of them. Modern Indian literature may be said to have begun with the emergence of the new Indo-Aryan and Dravidian languages of the South after the 1st century A.D.

Hindi

The epics and ballads of Rajasthan detailing the exploits of Hindu kings against the Muslim invaders constitute the beginnings of Hindi literature. The great work *Prithviraj Raso*, written by Chand Bardai, is a landmark in Hindi literature. This was followed by a revival of Vaishnavism and the literature of the period was characterized by an intense extrovert devotion to an omnipotent god who, from time to time, assumed human form to cleanse the world of evil. To this *bhakti* (devotion) movement, as it is called, belong the saintly poets Kabir, Mirabai, Surdas and Tulsi Das. Between the 16th and 17th centuries, Tulsi Das rewrote the *Ramayana* in the old Awadhi form of eastern Hindi. In Rajasthan, Mirabai sang the praise of God in ecstatic terms and her rhythm and devotion swayed millions of hearts. Between the 17th and 19th centuries, some of the best lyric poetry was written in Hindi, but towards the end there was a decline in its quality. With the advent of printing and English education, Hindi received a fillip and Hindi prose has since developed rapidly. There are a number of writers experimenting with all literary forms.

Bengali and Assamese

Chandidasa was a great Bengali poet of the 14th and 15th centuries. He wrote some fine lyric poetry. A biography of Chaitanya, a Vaishnava religious reformer, by Krishnadasa Kaviraja is an outstanding work in Bengali prose. Narrative tales of heroism and devotion and romantic ballads occupied a prominent place in Bengali. Bankim Chandra Chatterji, novelist and essayist, is considered the greatest writer of modern Bengali literature before Rabindranath Tagore. Ishwarchandra Vidyasagar became a household name in Bengal in the 19th Century and at about the same time Michael Madhusudan Dutt wrote English and Bengali poetry of considerable merit. In 1913, Tagore won the Nobel Prize for Literature. It is to Tagore mostly that modern Bengali is indebted. A standard Bengali is used for prose throughout the province and Bengali has probably been more susceptible to Western influences than any other Indian language. Standard Bengali translations of Shaw, Eliot and Ezra Pound are popular.

Assamese has a devotional literature of rare quality in the writings of Sankaradeva and other writers of the 15th and 16th centuries. A striking feature of Assamese literature is the series of prose chronicles known as *buranjis*. These are imitations of the chronicles of the

Ahoms, who had affinities with the Siamese and conquered Assam in 1228. They ruled over the province for six centuries and were subsequently absorbed in the local population.

Western India

In the Maratha country, Dnyana Deva wrote a commentary on the Bhagavad Gita, a philosophic discourse contained in the epic *Mahabharata.* He was followed by a succession of saintly poets and reformers, of whom the most popular was Tukaram. The ballads or *powadas* of Maharashtra narrate episodes from Maratha history. The foundations of modern Marathi prose were laid by the earlier essayists, writing chiefly on social and political reforms. Chiplunkar, Agarkar, Ranade and Tilak were among the important writers. Hari Narain Apte developed a sense of social awareness through the novel.

Mahatma Gandhi and K. M. Munshi have made significant contributions to modern Gujerati literature and journalism in recent times.

South India

Under the patronage of the powerful rulers of the Vijayanagar Empire, some poetry of value was written in Telugu. Ballads, historical narratives and didactic poetry constituted the bulk of Telugu literature during this period. In modern Telugu, *Soundaranandam* is acknowledged to be a very fine piece of poetry. The Telugu poet Vankata Sastri has several works to his credit. Modern Malayalam draws its inspiration from classical Sanskrit and European sources. Vallathol's poetry is characterized by a very sensitive social conscience.

In the 12th century, the *Ramayana* was translated into Tamil by Kamban. This book is an outstanding work. The advent of English, though it temporarily diverted attention from Tamil, has on the whole had a very salutary influence. The poet Bharati was the leader of the revivalist movement. Since his time, Tamil literature has made rapid progress.

Bendra and Puttappa are two well-known names in contemporary Kannada literature. The modern Kannada novel deals predominantly with social problems.

Urdu

When the Khilji rulers of Delhi invaded the Deccan in the first half of the 14th century, Urdu was transplanted to fertile soil. It was from the Telugu and Kannada-speaking areas that Urdu literature first received distinctive contributions. The King of Golconda, Mohammed Quli Qutub Shah (1580-1611) was a talented poet from the South. Wali, another poet belonging to the Moghul period, was the greatest of them all.

In the meanwhile, Urdu was spreading from Delhi and there grew up a refined class of courtiers well versed in polite letters. The best Urdu prose was written by the so-called "Fort William" writers. Towards the end of the 19th century, Ratan Nath Sarshar wrote his famous novel *Fasana-i-Azad*. While Hali and Mohd. Hussain Azad were the first of the moderns, Iqbal was undoubtedly the greatest among them and is very widely read.

Of the short story writers, Prem Chand, writing in the language of the common man, is held in very high esteem. Among living poets, Jigar and Firaq are probably the most outstanding.

CHAPTER III

PAINTING

Indian painting, like all ancient Indian art, is social in its inspiration. Unlike the modern artist, who improvises techniques sometimes merely to establish his singularity. the Indian artist of old was content to remain anonymous and to create within a given framework of codes and regulations. The means of self-expression accessible to the modern artist, such as choice of theme, colour and technique, were denied to him. Ancient Indian art has thus to be looked upon as the mode of expression of a multitude of talented draughtsmen whose art acquired meaning and unity only in relation to a functional society where every calling was ordained.

The history of Indian painting is the story of ancient Indian civilization in pictures. The frescoes in the Ajanta caves are largely based on the *Jatakas*. stories depicting the life of the Buddha, with incidents from his previous incarnations, in rich hues of blue, red and yellow. Thanks to the confusion in the mind of the artist between the legendary and the contemporary situation, some of these frescoes came implicitly to reflect aspects of contemporary life.

Ajanta was a Buddhist monastery about 60 miles from Aurangabad. In the recesses of a mountain resembling a horse-shoe, 26 caves and four *chaityas* (prayer-halls) were carved out and their walls and ceilings profusely painted. The paintings were executed over a period of several centuries beginning with the 1st century B. C. Time and vandalism have told on their artistic wealth and only a few of the caves have been spared to posterity. The Ajanta artists worked out the melodic possibilities of line and skilfully modulated colours to impart a plastic suggestion to the frescoes. Ajanta has thus remained a perennial source of inspiration to all Indian and even Asian art.

The frescoes are by no means peculiar to Buddhist art and their technical excellence survived their associations with various religions. For instance, in the 6th century A. D. they were used to expound the values and ideals of Brahmanical Hinduism. The caves of Badami at Bijapur are the earliest extant examples of Brahmanical painting. They tell the story of the divine pair Siva and Parvati, their marriage and Siva's dance. The Jain frescoes of Sittanavasal in Pudukotah were executed during the 7th or 8th century.

In the cave paintings of Ellora, which narrate the exploits of Siva and the *avatars* (incarnations) of Vishnu, the Ajantan line had lost its flow and continuity and had become brittle and angular. However, these are universally accepted as some of the best achievements of Indian painting.

By the beginning of the 9th century, the art of fresco painting had lost much of its verve. Miniature painting came into vogue and there sprang up the Pala School of Bengal from the 9th to the 12th centuries. This school employed simple compositions to illustrate palm leaf manuscripts of Buddhist scriptures.

Similarly, between the 11th and 15th centuries, the Gujerati School illustrated Jain scriptures with miniature paintings. In the early period palm leaves were used, but by about the 14th century paper had come into use. Some of the best extant specimens of this school of painting belong to the transitional phase in which the palm leaf was being discarded in favour of paper. Though the early miniatures were confined to the Jain texts, they appear later as illustrations in the sacred books of the Hindu Vaishnavites also. The art of love and the pleasures of spring are more important examples of their secular themes.

MINIATURES

By the middle of the 16th century, the mediaeval period in painting had come to a close and the Rajasthani miniatures made their appearance. In fact, the Gujerati

School provides a link between the frescoes of the Gupta period and the miniatures of Rajasthan and the western Himalayas (Kangra valley). Dr. Ananda Coomaraswamy accords the Rajasthani miniatures "an honourable place among the great arts of the world". This painting is firmly rooted in the earth and among the common people who inhabit it, the central theme being love. The artists convey traditional ideas in a variety of exuberant colours. These paintings, which share the characteristics of both secular and didactic art, combine religious fervour with lyricism and rhapsody. The colours are bright without being tawdry.

In Rajasthani art, scenes from the *Ramayana* and the *Mahabharata* are brought to life in vivid colours. The lasting contribution of Rajasthani painting to Indian art is perhaps the *Ragamala*. Painting, like all other arts, "aspires to the conditions of music", and artists all over the world are known to have progressively moved away from the method of forthright statement; they prefer to produce a mood or indicate an idea by suggestion. Each *raga* (meaning a musical mode) suggests a particular sentiment and has an appropriate time of the day for its perfect evocation—either the dawn or early evening; either the dalliance of extrovert lovers or the lover who pines for her consort. Thus the *ragamalas,* literally meaning "garlands of musical modes", seek to render explicit the relevant moods which inspire particular *ragas* through line, form and colour. For instance, the pictorial representation of the Todi *ragini* is usually of a charming woman who plays the *vina,* a musical instrument peculiar to the South, which attracts deer and other animals, who listen in silence.

While simplicity and lyricism mark the miniatures of the 16th century, the art of the following century is more sophisticated. Symbolism is used for the first time to illustrate the moods of love. Between the 17th and 19th centuries, the *Pahari* (hill) school of painting flourished in the remote valleys (Kangra area) of the western Himalayas. The life of Lord Krishna, the cow-herd god, and his amours with the milkmaids, as well as dance and music are the themes of these *Pahari* miniatures. The Kangra school is noted for its soft colours and melodious lines. The feminine figures are drawn with great delicacy.

MUGHAL PAINTING

The Mughal school of painting was influenced by Persian traditions during the first half of the 16th century. It was essentially a secular art, created for the amusement of the emperors and the nobility. Portraits, pictures, colourful ceremonies at court, hunting scenes and studies of birds and flowers form the bulk of Mughal paintings. Religion, legends and the life of the people did not interest the nobility, who attached great importance to technical excellence and craftsmanship. Lines were drawn with a fine brush made from the hair of the squirrel's tail, and some of the artists executed fine paintings with the single-hair brush.

During his brief reign, Humayun employed two well-known Persian artists. Akbar, who succeeded him, was an eclectic and a great connoisseur. His court represented a cross-section of all schools of painting in the country. The paintings executed under his patronage absorbed the best of Rajasthani and Persian influences. He employed several artists, mostly to illustrate Indian and Persian manuscripts. Large frescoes adorned the palace walls. These have, however, perished, and all that remains are a few specimens in Akbar's palace at Fatehpur Sikri. The miniatures were painted on fine Indian and Chinese paper; they were not hung on walls but compiled in albums.

Akbar's son, Jahangir, was fond of birds, animals and flowers. He kept alive the artistic traditions of his great father, but under him painting assumed a new role. Its use was no longer restricted to the illustration of manuscripts. It was under him that portraiture became a widely practised art. The Emperor often referred to Mansur as the greatest of all animal painters and Bhisandas as supreme at portraiture.

The Mughal painters drew from living models and some of their paintings are penetrating studies in character. Although Shahjahan was more interested in architecture, painting continued to be patronized during his reign. A new style of portraiture was thus evolved, and its exquisite work was heightened by a few touches of colour. With the accession of Aurangzeb, court patronage was withdrawn and the artists had to fall back on the minor courts of the various principalities of the realm.

Mughal art was highly individualistic and the artist did not conceal his identity. The element of formalism, however, persists through the later Mughal paintings.

Mughal art finally outgrew its initial stimulus. While it indisputably bore the impress of Persian influence, it became Indianized eventually. Notwithstanding the resistance of a few artists, who sought to preserve the purity of the Persian tradition, the conglomerations that made up Indian life slowly permeated Mughal art and gave it its Indian character, which it retained.

MODERN PERIOD

The Dharamsala earthquake of 1905 wiped out a whole community of painters. However, the inspiration that gave rise to Mughal and Rajasthani art had by this time lost its verve and the miniatures and portraits still painted in imitation bore no relevance to the changed situation. The impact of European culture led to the formation of art schools under European guidance in Calcutta and some provincial towns. Of all the artists of this period who sought to borrow from the techniques of the West, Raja Ravi Varma alone reached a standard of technical adequacy that deserves mention.

It was Havell's insistence on the tradition of Ajanta and Rajasthan that weaned Indian students from indiscriminate imitation of Western art. Havell, head of the Calcutta School of Art, was one of the pioneers of the movement which sought to go back to the wisdom of the past for inspiration.

Indian artists abandoned European methods of oil painting and returned to water colours. Western ideas of verisimilitude and correct realization of perspective were given up, and the artists turned to the *Ramayana*, the *Mahabharata* and to Kalidasa for their themes. They further drew freely on models of Japanese and Chinese paintings. Abanindranath Tagore evolved a distinctive synthesis of the traditions of Chinese calligraphy, Japanese colouring and Persian finish. Like Rossetti, who recaptured the quaint devotion of the Italian primitives in his Christian themes, Nandalal Bose recreated the atmosphere of Ajanta.

Unlike those of Bengal, the Bombay artists were eclectic in their outlook. In 1919, the Western technique was included in the curriculum and "life classes" were started. The authorities, however, knew better than to ignore the decorative tradition in Indian art. They were alive to the dangers of overdoing the life classes and a separate class for decorative painting was therefore started. These measures obviated the dangers of transplanting new techniques to alien soil and narrowed down the differences between the Bombay and Bengal schools. In the murals in the secretariat at New Delhi, executed by students of the Bombay school, the Ajantan element is conspicuous.

A vital issue was forgotten in the controversy centring around the use of Western and traditional techniques. The protagonists of neither school realized that the modern temperament needed to be interpreted in a new way and that its interest would not be served by controversy. When the works of the moderns caught the public eye, neither the traditionalists nor the representationalists scored a point. Modernism has often evolved and supplied its own needs and thus served to gloss over the differences between the two schools. Though modern artists ostensibly belong to one school or the other, they improvise and, in so doing, venture outside the precincts of known territory.

Gaganendranath Tagore, Rabindranath Tagore, Jamini Roy and Amrita Sher Gil were the pioneers of modern Indian art. Rabindranath was a creative writer and did not have to fall back on myth and legend. Technically more competent, Gaganendranath was more concerned with contemporary society and its problems and ridiculed social foibles in fluently drawn black and white sketches. For a time he experimented with cubism and developed the pictorial possibilities of light. He served to infuse confidence in younger artists who wanted to break from the revivalist movement in search of freer expression.

Dissatisfied with his early attempts executed in the styles of the West, Jamini Roy modelled his work on folk art and turned to the *pat*, the scroll and motifs of decoration on village pottery for form. He found the technique of the revivalists overburdened with obscure allusions.

A spirit of intense devotion pervades the work of Amrita Sher Gil. She also pleaded for a return to the spirit of Ajanta, but not so much for subject matter or form. To her Ajanta symbolized an integral relation between the artist's message and his choice of form and colour. For each artist there exists a specific and unique organization of form and colour which alone can convey his meaning. She proved that an artist who chooses a secular theme can convey earnestness and dedication as much as another who relies on religious subjects.

Contemporary Indian art is more difficult to evaluate because of its heterogeneous tendencies. It is inspired by influences from various countries. This is undoubtedly the most fruitful phase in Indian painting.

During 1953 and 1954, three Academies—of Letters, Dance, Drama and Music and Arts and Architecture—were set up. The last-named the Lalit Kala Akadami (National Academy of Arts) inaugurated in August 1954, promotes study and research in painting, sculpture, architecture and other applied arts. Its multifarious activities include the promotion of co-operation among art associations, encouragement of the exchange of ideas between various schools of art and co-ordination of the activities of regional or State academies. Thanks to the Lalit Kala Akadamy Delhi has become an important centre of art and culture. Art exhibitions are held frequently and the people have become much more art-conscious than before.

CHAPTER IV

ARCHITECTURE

Indian architecture has developed under two influences. While religion has decreed its form, the evolution of constructional methods and building materials has determined its principles. It falls naturally into five periods—pre-Buddhist, Buddhist, Hindu, Muslim and Modern. Generally speaking, the earlier architecture is trabeate, with beams a feature. An all-pervading symbolism, a plastic conception and the use of heavy masses are its main characteristics. Construction involved vertical and not lateral pressure until, in the 12th century, the true arch made its appearance. With the beginning of the Muslim period, the art of building became largely geometrical, the square, the cube, the circle and the hemisphere being the forms most commonly employed.

PRE-BUDDHIST PERIOD

The cities of Harappa and Mohenjo-daro,* belonging to the pre-Aryan civilization (3000—2000 B.C.) are the earliest evidence of architecture in India. They consisted mainly of homesteads, store-houses, baths, avenues and wells. Built in brick, the style was plain and functional. The remains point to the existence of a complex drainage system showing a high degree of planning and engineering skill.

Of the Vedic period (c. 1500 B.C.) no surviving relics were found till quite recently. The Vedic and the post-Vedic periods, therefore, used to be called dark periods, archaeologically speaking. Recent discoveries at Jagatgram, near Dehra Dun, however, provide evidence of the architecture of the Vedic period. Two of the four sites at Jagatgram relate to the performance of the *asvamedha* (horse sacrifice) by a Vedic King Silavarama. A large number of inscribed bricks have been unearthed along with a sacrificial altar in the shape of a hawk in the act of flying. The altar is an architectural rendering of what the Vedas have recorded on the subject of the horse sacrifice.

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*A Sindhi word meaning "the place of the dead"

The earliest surviving examples of Buddhist architecture are the *chaityas,* also called *stupas.* These structures form memorial mounds over the relics of holy personages. The term *chaitya* itself, derived from the word *chita,* meaning a pyre, has come to denote a shrine, an altar or temple, while *stupa* is the technical name given to these mounds. Typical of this form are the structures at Sanchi. Orginally built in brick by Asoka in the 3rd century B.C., the stone coverings, railings and gateways are believed to have been added later, mostly in the 1st century B.C., and up to the 4th century A.D.

A *stupa* essentially consists of a base of different geometrical designs on which is mounted a hemispherical dome (*anda*), truncated at the top. The summit of this dome carries a small pavilion (*harmika*) from which rises the shaft (*danda*) of the parasol (*chhatra*). The *chhatra* was the Indian symbol of sovereignty. The top of the parasol, originally one, gradually increased in number, evolving into the Indo-Aryan spire which consists of a central shaft rising through a series of parasol tops laid one over the other. Along the margin of the terrace runs a massive stone balustrade made up of pillars (*stambhas*) and crossbars and mounted by copings. The walk on the terrace between the dome and the balustrade served as a procession path. Set in these stone railings are four gates (*toranas*) which consist of two uprights supporting one or more horizontal beams. The lintel is profusely carved with reliefs and ornaments.

Next come the two main forms of Buddhist architecture, the *chaitya* and the *vihara.* The *chaitya* was a temple of worship and the *vihara* a place of residence and assembly. The *chaityas* at Bedsa, Nasik, Karle and Ajanta illustrate the development of this form. A typical *chaitya* is a long, apsidal building with a barrel-vaulted roof, and a nave and aisles terminating in an apse or semi-dome. Rows of pillars, separating the nave from the aisles, continue round the apse. Contained in the apse is the rock-cut *stupa,* somewhat in the position of an altar in a Christian church, and directly opposite the *stupa* is a horseshoe-shaped window. Cave 19 at Ajanta presents perhaps the best example of a *chaitya* hall. A *vihara* is a rectangular hall surrounded by cells, the centre of the back wall providing the sanctum.

The *chaityas* at Bedsa, Nasik and Karle also offer interesting studies in the development of the *stambha*—the Indian pillar. A *stambha* consists of a shaft surmounted by a capital or abacus of upturned lotus. The cornice consists of effigies of bulls and horses and sometimes human couples (*mithunas*). The *stambha* of cave architecture reminds one of Asoka pillars carrying effigies of animals associated with the various incarnations of the Buddha. Later, as at Ajanta and Badami, the *stambha* evolved elaborate shapes.

HINDU TEMPLES

The Brahmanical form of worship was already in existence when Christ was born, and the Hindu temple is indicated in embryo in a *stupa* in one of the Ajanta caves which has an image of the Buddha carved on it. The earliest surviving temple is the flat rectangular shrine at Sanchi; it belongs to the early part of the 5th century. Exquisite ornamentation with bands of relief figures and scrolls is the characteristic feature of the flat-roofed temples of the Gupta period. A special motif in these relief figures is the row of couples (*mithunas*).

The shrine at Sanchi contains the nucleus of a Hindu temple of which, as a type, the distinguishing features are: (1) a cubical cell (*garbha-griha*) containing the image of the presiding deity surmounted by (2) a tower with (3) a porch (*mandapa*) in front and (4) a perambulation path (*pradakshina patha*) round the temple, which is sometimes in the form of a narrow passage with a sloping roof and is called the *ardha mandapa*. Also, in some southern temples, a small room (*antarala*) is added between the cell and the porch.

By the 6th century, three distinct structural styles had evolved—the Nagara, Dravida and Vesara. Of these, the first two carry the curvi-linear *sikhara* roof, while the Vesara was evidently derived from the cave shrines of the Buddhist period. Typical examples are to be found in the *rathas* of the Seven Pagodas at Mahabalipuram.

The Nagara, also known as the northern or Indo-Aryan type, flourished in North India, where the worship of Vishnu predominated. Its characteristics are the *sikhara* and a peculiar finial of the ribbed *amalaka* (the symbolic myrobalan fruit) culminating in a *kalasa* (auspicious jar). Scattered over Bhuvaneswar, Konarak and Puri in Orissa are 35 important temples with numerous replicas in miniature typifying the different stages of development of this style between the 8th and 13th centuries. Among these, the earliest is the Parasrameswar temple (8th century) while the Sun temple at Konarak is the latest, belonging to the 14th century. The Great Lingaraja temple (early 11th century), with its aggressive development of the *amalaka* and the almost parallel lines of its tower, is characteristic of the Orissan group.

In Rajasthan, the earliest example of the Nagara group is the Sun temple at Osia (near Jodhpur), attributed to the late 9th century.

The next important group of Nagara temples belonging to the 10th and 11th centuries is found at Khajuraho in Madhya Pradesh. In these temples, an effect of magnificence is created by a cluster of smaller towers built around the principal tower; shaded balconies and sculptured facades add to the distinction. The finest among these, the Kandarya Mahadeva temple, is 116 feet high.

The Visvesar temple at Banaras, rebuilt on earthen foundations during the 18th century, is a later development of the Nagara, while the temple of Scindia's Mother at Gwalior (19th century) represents the ultimate stage in the evolution of Orissan temples. New features were developed in Rajasthan and are exemplified in the Jain temples at Mount Abu.

Another interesting development in the Nagara style was the four-faced (*chaumukha*) temple, employed mostly for the four-faced Jain images, each face overlooking an entrance.

The Dravidian temples belonging to the South Indian school of architecture are dedicated mostly to the worship of Siva. The earliest examples are the cave shrines scattered over North Arcot and Tiruchirapalli. The first temple was built of dressed stones in the reign of Rajasinha of Kanchipuram (700-710 A.D.) An early example is the temple at Mahabalipuram, notable for its pinnacle (*chudamani*). The genuine Pallava temple is represented by the Kailasanatha temple (early 8th century) at Kanchipuram.

The Dravidian temple underwent further modifications under the Cholas, the successors of the Pallavas. The tower (*vimana*) increased in height and the pillars became slender and elegant. Characteristic of this period are the arches (*toranas*) over the niches (*devagostas*) and the large *mandapams* or pavilions resting on intricately carved pillars. *Gopurams* (gate towers) first appeared under the Cholas and are a special feature of Dravidian architecture; later they developed gigantic proportions, almost dwarfing the main tower. The Siva temple at Tanjore (early 11th century), the temple at Gangaikondacholapuram (11th century) and the *nartana-sabha* (dancing hall) at Chidambaram carry these modifications. The architecture of the later Chalukyas (10th to 12th centuries), almost contemporaneous with the Cholas and the Pandyas, incorporates elements from both the northern and southern styles. These temples, star-shaped in plan, cover a wider area and are characterized by their low elevation. New forms of pillars and a distinctive tower are further improvements on earlier temples. The tower, very minutely carved, resembles a ribbed cone. Temples of this style are found at Ittagi, Gadag, Somnathpur, Belur and Halebid.

MUSLIM ARCHITECTURE

In the 12th century, the Muslims brought to indigenous art inspiration drawn mainly from Syria, Egypt, North Africa and Persia. The new architecture, confined in the beginning to Delhi and its environs, later spread over the country. In the process, it developed a strong national character.

The Kutb Minar, started by Kutb-ud-Din Aibak, the first of the so-called Slave kings of Delhi, about 1200 A.D., is the first outstanding structure in the Islamic style. Enclosed within a mosque, it was meant originally for the muezzin's call, but was later taken for a tower of victory. The mosque was doubled by Iltutmish in 1229, and Ala-ud-Din Khilji afterwards added a third court to it. To the Tughlak period (14th and 15th centuries) belong the citadels of Tughlakabad and Kotla Firoz Shah. Massive walls, gigantic bastions, lofty narrow portals and an overall repetition are peculiar to the architecture of this period. Along with an elaborate attention to surfaces, the Sayyid and Lodi kings, who followed introduced the lotus finial on their domes; they also used blue enamelled tiling successfully for decorative purposes.

Simultaneously, there was considerable building activity in the provincial capitals. These developed their own individual styles, particularly between the 13th and 15th centuries. In Bengal, annexed in 1198-99 by Muhammad Bakhtiyar, the Muslims adopted, probably for the first time, bricks, bamboo and timber as building materials. Square, short brick pillars, curvi-linear roofing and surface decoration were the characteristics of the Bengal style which the Muslims incorporated into their own architecture. At Pandua, the Adina mosque built by Sikandar Shah (1358-89)consists of an immense, open rectangle bounded by arched screens and arcades on all sides. One archway, loftier than the others, breaks the monotonous uniformity. At Gaur, the Dakhil Darwaza (15th century) is an achievement in brick and terracotta, while for sheer ornamentation the Tantipara Masjid is outstanding. The local Muslim style of Gujerat was founded as early as the 14th century. Its outstanding monuments, the Jama Masjid and Tin Darwaza, were built by Ahmed Shah, the founder of Ahmedabad. The Tin Darwaza has an exquisitely framed delicate archway. The Deccan modelled its architecture on the Tughlak and Khilji styles, and even after its political secession in 1347 continued to follow the imperial tradition.

While the first Mughal Emperors, Babar and Humayun, contributed little or nothing to architecture, Akbar gave it new life. Humayun's Tomb at Delhi, built in 1565-66, consists of a square base and terrace recessed in the middle of each side. Each face contains a doorway, and the great dome is mounted on a high drum while the hall in the interior is surrounded by chambers connected by corridors and galleries. The Fort at Agra has imposing walls in red sandstone and two exquisitely designed gateways. But it is at Fatehpur Sikri that Akbar as a builder is most fully revealed. Agra Gate, Jodh Bai's palace, Birbal's house, the Diwan-i-khas, the Jama Masjid and the Buland Darwaza are some of the most beautiful examples of Muslim architecture. Jahangir, who followed Akbar, was preoccupied with pleasure gardens which to this day are found all over North India, the most beautiful being the Shalimar Gardens at Srinagar.

The next important development in Islamic architecture was the mixed use of red sandstone and white marble introduced by Shahjahan, who built the Taj Mahal at Agra and the Red Fort and Jama Masjid at Delhi. While the Red Fort and the Jama Masjid are noble and dignified the Taj Mahal is unique.

At Bijapur, the Adil Shahi dynasty introduced a new style seen in the Gol Gumbaz, the tomb of Muhammad Adil Shah (1626-1656). Its distinctive features are octagonal turrets, the bracketed cornice below the parapet and an ingenious arrangement of arches.

Under the austere Aurangzeb, like the other arts architecture, too, declined.

MODERN PERIOD

It is only now that Indian architecture is turning to secular motifs. The attention, love and pride of achievement that were formerly lavished on shrines, temples, mosques and palaces are now being devoted to city lay-Outs, housing, offices, hospitals, schools and national and public buildings.

As in painting and sculpture, the impact of Western influence has been keenly felt. Under the British, for instance, attempts were made to fuse Indian traditional forms to the British way of building, thus giving rise to the "imperial" architecture of New Delhi, prominent examples of which are Viceregal Lodge (now Rashtrapati Bhawan), the Secretariat buildings, Council House (Parliament) and the Victoria Memorial at Calcutta.

The problem confronting Indian architects today is to evolve an architecture best suited to their own outlook on life and physical conditions but based on present-day economics, materials and construction techniques. Attempts at the evolution of such an architecture, retaining time-tried solutions and usages such as the *jali* (trellis), *chaija* (sunshade), balconies and verandahs, but integrated with recent structural innovations, are proving both popular and successful.

The future of architecture in India depends on her architects developing the right practices with regard to building. Past styles of architecture were the outcome of the use of stones as the principal building material. This tended to give buildings of the historical period a static expression. The use of new materials of building like steel, concrete, glass, metals and plastics has created new possibilities of expression. During the last few decades, visual language and visual communication have come into their own in expressing movements and vibrations communicated through the eye as a medium. The basis for such communications are space, colour, form and texture, organized and articulated in an ingenious way. This has had a marked effect of dynamic expression unknown to past styles of architecture. Modern architecture has thus become an expression of abstract composition of space integration, the aesthetics of which depends on the efficient arrangement of various elements. This new architecture is extremely well illustrated in Chandigarh, the new capital of the Punjab.

After World War II, and especially after India became independent, there has been a tremendous spurt in the building programme, both official and private. Happily, the young generation of Indian architects has been ready for such mass building, and many fine examples of contemporary architecture all over India are the result of their efforts. Many new laboratories, industrial buildings, factories, offices, public buildings, hospitals and school buildings have sprung up during the past decade.

Some fine examples of contemporary buildings in India are the National Physical Laboratory, New Delhi; Vigyan Bhawan, New Delhi; the National Chemical Laboratory, Poona; the building of the Council of Scientific and Industrial Research, New Delhi; the Textile Research Laboratory, Ahmedabad, and the West Bengal Secretariat, Calcutta.

CHAPTER V

SCULPTURE

At its best, Indian sculpture was an integral part of architecture. Also, like other Indian arts in the past it was conditioned by a religious purpose. Though made to subserve building designs, it retained its character as a medium in its own right. The idea which it sought to convey was more important than form, with the result that sculptors idealized the human figure.

The earliest specimens of Indian sculpture belong to the Indus valley civilization. Engraved seals and terracottas were executed with great skill, providing evidence of artistic activity before the advent of the Mohenjo-daro civilization. Perishable materials were probably mostly used by the sculptors of Mohenjo-daro and their successors. There are for this reason few extant specimens of this period, particularly between 2000 B.C. and 500 B. C.

Meanwhile, the Aryans conquered the country and introduced the Vedic religion. Between the 8th and 5th centuries B.C., Brahmanism, Buddhism and Jainism had large followings and in the reign of Asoka Buddhism became the religion of the State. Asoka had a number of pillars erected with edicts inscribed on them; on their capitals were sculptured animals such as bulls, elephants, lions and horses. Often the sculptor turned out works of considerable magnitude. Thus there are stone structures of *yakshas* and *yakshis* (nature spirits) of colossal size. Since the deities were more powerful than men, they were represented in large dimensions.

The sculpture of the post-Asokan period consists mostly of bas-reliefs on the rails and gates of *stupas* depicting incidents from the life of the Buddha and legends of his previous births. No image of the Buddha occurs in the earlier period, during which he is represented by the Bodhi tree, the wheel of law, a throne, an umbrella or his footprints. Fine examples are seen in the carvings of

Sanchi and Bharhut. The Vedic gods, who had also been adopted by other religions, were not forgotten. At Bhaja, the rock-cut monastery near Poona, there are reliefs of the Sun god riding his chariot and Indra (the Supreme Being) on his elephant. Since there was no rivalry between Hinduism and Buddhism at this stage, Hindu deities found places on the walls of Buddhist temples and monasteries.

In the 2nd century A.D., the Kushan kings established their rule in northern India while the South was under the Andhras. The sculpture of the Kushan period was done on reddish stone, and a stupendously large image of the Buddha was carved at Mathura. In the tradition of the colossal Mauryan figures, this image represents an advance in artistic conception and execution, though the Buddha's expression had not yet acquired the serenity which characterizes the images of later periods. It was the Mathura Buddha and not the Gandhara one which became the model for the Gupta period. Mathura is also famous for the full-bosomed, slim-waisted nymphs and dryads carved on *stupa* rails and pillars. They are striking examples of linear grace. Specimens of Andhra sculpture are found at Karle and Kanheri in western India and Amaravati to the south-east. The reliefs on the *stupa* railings are said to be the finest examples of sheer sculptural beauty and technical skill in the pre-Gupta period. The times are chronicled in lissom figures with a striking suggestion of movement. These finely carved reliefs bring to mind the lines of a Mughal painting.

With the rise of the Gupta dynasty in the 4th century A.D. began a period which is generally described as the golden age of architecture and sculpture. The Gupta kingdom was politically integrated, and for the first time once could truly speak of a national culture. The sculpture of this period is characterized by simplicity and refinement, and is very often inseparable from its architecture. The treatment of drapery is such that its lines aid the modelling of the figure. The best specimens of the Buddhist sculpture of this period are to be found at Sarnath and Mathura and in the caves of Ajanta, Bagh and Aurangabad. The Buddha's face is set in tranquility and "the eternal Buddha dreaming his eternal dreams" thus came into being.

During this period the principles which created the Buddhist masterpieces were also applied to Brahmanical themes, and for the first time Brahmanical sculpture produced a whole pantheon of gods—far more numerous than those of Buddhism. Specimens of Brahmanical sculpture are to be found in the caves of Aihole, Badami and Udaygiri. The pillar brackets of the Vaishnava caves at Badami are the finest of their kind. A feeling of intense devotion, absent in later periods, pervades the sculpture in the Dasavatar temple of Deogarh and the caves of Aihole.

In the 7th and 8th centuries, the images of Brahmanical gods and goddesses were imbued with amazing vitality and rhythmic movement. Though the modelling was done in simplified planes, the total effect suggested vigorous movement.

The best specimens of the sculpture of this period can be seen at Ellora, Elephanta and Mahabalipuram. The Hindu pantheon is sculptured in relief on the walls of the caves at Ellora. At Elephanta, the figure of the Trimurti (three-faced) Siva, in the aspects of Creator, Preserver and Destroyer, is an outstanding contribution.

The monolithic rock shrines of Mahabalipuram have some of the most robust sculptures. In the medieval period, sculpture was put chiefly to the purpose of adorning pillars, friezes and brackets in temples. Gods and goddesses were carved with a number of heads to represent their multifarious aspects. The Pala art of eastern India has a rich variety of images in stone and metal, though the greatest profusion of metal images is that of the Chola period of South India. The temples of Bhuvaneswar, Konarak, Khajuraho and Mount Abu are profusely carved with a variety of subjects, including erotic themes. With the Mohammedan conquest of the north in the 13th century, however, many temples were destroyed and temple building was more or less restricted to the South. In the Deccan the Hoysala and Kakatya Schools created temples with a wealth of decoration. The best examples of temple sculpture in Southern India belong to the times of the Cholas and Pandyas. The Cholas are remembered by the Tanjore and Gangaikondacholapuram temples and the Pandyas by the temple at Madura, to which important additions were made by the Nayaks. Some of the great temples of South India are of the Vijayanagar period of history.

The art of the ancient masters has not been forgotten to this day and specimens can be found in South India, Rajasthan and parts of northern India and Gujerat. The work, however, seems to lack inspiration and the forms tend to be stereotyped.

Modern sculpture, like painting, has experienced a revival. While the general trend is towards social awareness and the simplification of form, there are some sculptors who have been content to follow the rhythmic, decorative tradition of the Gupta period. Others, like D. P. Roy Chowdhury, B. Ramkinkar, V. P. Karmarkar and Chintamani Kar have been considerably influenced by European art. Concurrent with experimentation in these styles, the possibilities of new media like concrete and wood are being explored.

CHAPTER VI

HANDICRAFTS

Ancient art was more spontaneous than that of the present day, for in those times the artist was not oppressed by the need to create Art was incidental to life and, therefore, integral to it. The handicrafts of India are a good example. In the rural India of old, craftsmen produced articles of everyday use. "Everything was hand-wrought and everything, down to the cheapest tool or earthen vessel, was therefore merely a work of art." The skill of the Indian potter of pre-history is borne out by the excavations at Mohenjo-daro and Harappa.

Spinning, weaving and dyeing are among the oldest and best known of Indian handicrafts. Although a highly organized textile industry exists in India today there are 2½ million handlooms in the country which turn out about 1,500 million yards of cloth and provide a livelihood for about 14 million people. They produce colourful materials of unique designs which are often preferred to mill-made textiles and provide clothing for a third of India's population. Egyptian mummies are said to have been swathed in muslins from India and Indian brocades and muslins were sold in the markets of Asia and Europe. Cotton fabrics have been found at Mohenjo-daro and the figures of Ajanta are draped in silks and muslins.

Kamkhwabs are silk fabrics which are brocaded with gold or silver thread to produce striking patterns. The moon and stars and the peacock's head are some of the more popular motifs used. Though crude machines are employed to draw out the metal, the wire is thinner than the human hair. The sanes loom is used to produce a fabric of the simplest design or a bed-cover with an intricate pattern of a dozen colours plying across the warp and the woof. Banaras in U.P., Murshidabad in Bengal, Ahmedabad and Surat in Bombay and Tiruchirappali in Madras are famous centres of brocade weaving.

Mysore produces georgettes, chiffons and tissues of high quality. Kashmir also makes a variety of silks. *Saris* in a multitude of pleasing patterns are woven in Murshidabad. Surat specializes in silks and satins, while Rajasthan makes very fine gauze which women use for *dupattas*. This piece of colourful cloth adds charm and grace to the bright costumes of women in the north. Originally used to cover the head, the needs of modern life have invested it with a new function. It is now worn round the neck and across the shoulders, the two loose ends hanging at the back.

The principal weaving centres for fine cotton during the medieval period were Dacca, Masulipatam and Patan, noted respectively for muslin, chintz and *pitambar*. The most famous weavers were those of Dacca, and their muslins are said to have been as fine as a spider's web. When the material was spread out on the grass to bleach it was invisible in the light of the sun.

Handloom-weaving is still a flourishing industry in many States. Fine *kheses*, a sort of blanket-cum-mattress, and *lungis*, a broad-checked man's dress tied round the waist for informal use, are made in the Punjab; *jamdani* (figured muslin) is a speciality of Bengal. Cotton shawls are woven in Assam and Manipur. Examples of beautiful embroidered textiles are the *muga* silk of Banaras, the satin-stich *phulkari* of the Punjab and the *kanthas* of Bengal.

The Indian dyer has a passion and genius for colours. From the saffron-coloured, pleated skirts and blue veils of the *Jatnis* of Delhi to the glowing reddish brown of the *Kumbi* women of the Deccan, everywhere is seen the perfection of the dyer's art. The process by which the *patola* silk of Baroda is made is as complicated as it is fascinating. The technique of "double tied resist-dyeing" (*bandhan*) is used and, before weaving, the warp and weft are dyed separately according to a pattern. The favourite colours are soft, deep-toned madder red, golden yellow, jet black and sometimes bottle green. The rhythmic design and characteristic blending of colours have a very pleasing effect. This technique of tie-dye is used for muslins, chiefly in Jodhpur and Jaipur.

Calico-prining is a widely practised art in India. The counterpanes and shawls (*fard*) of Lucknow, Kanauj and Farukhabad and the printed *saris* of Amritsar are good examples. The calicos of Sambar in Jammu are of Persian design and are used mostly as wall drapings, floor coverings and canopies. Jaipur fabrics are dyed on both sides with the patterns so cleverly printed that they do not have a "wrong side". Jodhpur calicos are cut into strips and sewn together to make skirts for the women of Rajasthan.

The chief woollen fabrics of artistic merit are those made of *pashm* wool, called *pashmina*. Kashmiri shawls are famous for their delicate workmanship.

CARPETS

Carpet-weaving is another ancient Indian industry. Besides Kashmir, Amritsar, Jaipur, Bikaner, Agra and Warangal in Hyderabad are well known for their beautiful carpets. A carpet from Mirzapur has behind it a tradition of skill going back to the days of Akbar. Quality wool is washed, teased, carded and then spun by hand. The skeins of wool are usually dyed in vegetable colours. The carpet loom has a vertical warp of cotton thread, to which knots of woollen yarn are tied in a particular design. The human eye cannot follow the amazing quickness with which the weaver ties the knots. The design is drawn on a graph sheet and the instructions are sung while the carpet is woven. After a row of knots has been tied, the uneven pile is clipped with a pair of scissors to give it uniformity and a smooth touch. At times weavers take over a week to finish a yard of a carpet of exceptional quality.

METAL-WORK

The *cire perdue* process of casting copper and bronze was perfected in the South. The striking bronzes of South India were inspired by Saivism, and the alloy originally used was of gold, silver, copper, lead and tin. Hyderabad excels in *bidri-ware*—metal pots and jugs inlaid with silver sheet and wire. Apart from the variety of designs, the beauty of *bidri*-ware lies in the striking contrast between the black base and the inlaid metal. The art of enamelling on metal known as *minakari*, flourishes in Banaras, Delhi, Lucknow, Rampur, Alwar and Kashmir, while Jaipur produces the best enamelled jewellery. In these places, the metal is chased before it is damascened. The repousse method is preferred in Kashmir.

Engraved brass-ware with flowers, landscapes and jungle scenes as motifs comes chiefly from Jaipur, Moradabad and Banaras. Among the various styles in use for embellishing gold and silverware, the *swami* style is the most important. It is composed of mythological medallions and canopied niches in imitation of the encrusted style of work characteristic of South India. An interesting branch of the silver and goldsmith's craft is filigree work, which is practised mostly in Cuttack.

Inlay and *jali* work in marble are among the more important stone-carving industries of India. The Taj Mahal is the most outstanding example of the Mughal art of inlaying marble with semi-precious stones, such as agate and jasper. Samples of intricate *jali* (fretwork) in marble and sandstone are to be found in many parts of India. The chief centres of stone-carving are Rajasthan, Madhya Pradesh, Delhi, U.P., Orissa, Bihar, Bombay and South India. They produce wall-brackets, flower vases, candlesticks, chains, lamp-posts, etc., using sandstone, marble, alabaster, soap-stone and pebbles. In Jaipur, dagger-handles, beads, buckles and necklaces are made from rock crystals. In Kashmir, turquoise is used extensively to make jewellery. Green jade is used to make chess tables, *surahis* (water pots) and tumblers.

POTTERY

The ornate pots of Gwalior and Khurja are elegant and inexpensive. The pots from Alwar, made of fine clay, are so thin that they are called *kagazi* (meaning "like paper"). In Aligarh pottery the design is moulded on the surface by the fingers before it is fired. Azamgarh, Ratnagiri and Madura are best known for their black pottery. Painted pottery is largely produced in Kotah, Lucknow, Jullundur and Salem. Khurja and Rampur produce glazed rose-bowls, dishes, pitchers, etc., of deep blue with the pattern moulded on the surface.

Of painted pottery there are two varieties. One is painted or stained before firing, and the other painted, lacquered or stained after firing. In Madura, the stained surface is smeared with lac.

Santiniketan is experimenting with paintings in dark colours on brown glazed pottery. It is reviving some of the old motifs, such as the fish swastika and crab.

WOOD

Kashmir in the north, Mysore and Kerala in the south and Rajasthan and Gujerat in the west have characteristic designs of wood-carving. The walnut woodwork of Kashmiri craftsmen is highly intricate and elaborate. They make folding screens, tables, cabinets and picture frames. Sandalwood is used in Mysore to make highly ornate articles of common use. Flowers, animals and deities are the motifs usually employed, and the smallest miniature is as sharp and vivid as a life-size sculpture. At Jullundur, wood is inlaid with ivory and *shisham* wood with brass. In Manipur, copper and brass wire are used for inlaying.

IVORY

The tusk of the elephant, even more than wood, is an ideal medium for the carver's art. The ivories of Kerala and Mysore are characterized by intricate and delicate craftsmanship. The ivory idols of gods and goddesses succeed in catching the authentic moods and expressions of those legendary figures. Some fine pieces of ivory are also made at Murshidabad and Cuttack. One of the striking ivory panels produced in South India has found a place in the National Museum of Florence. Utility goods of ivory, such as combs, caskets, cigarette boxes and chess-men are to be found in shops all over India. The best examples of inlaid ivory may be seen in the Golden Temple of Amritsar.

OTHER HANDICRAFTS

Made of painted clay or wood, metal or cloth, toys are the essence of folk-art. The skilful potter makes quaint toys for the village fair. Richly dressed cloth dolls made by women are used in marionette shows, which are a feature of Indian village life. Their bright trappings and durability make cloth toys popular everywhere. Excellent painted toys of baked clay are made in many districts of Madras, Bengal and Uttar Pradesh, while wooden and metal toys are popular in all parts of India.

Jewellery made of gold and silver, patterned exquisitely and studded with diamonds, rubies and other precious stones, is an ancient art in India and each State has characteristic designs and patterns.

Lavishly painted papier mache products such as bowls, powder-boxes, trays, vases and lamp-shades are made in Kashmir.

DEVELOPMENT PLANS

There are many more varieties of handicrafts in India. Recent efforts to develop them have yielded encouraging results. During the first Plan period the Government of India constituted an All-India Handicrafts Board to formulate schemes for the preservation of ancient crafts and to develop them further.

The Board has recommended several schemes to improve the production of handicrafts as well as their marketing potential. It has also set up pilot centres for the rehabilitation of decaying handicrafts and for the improvement of techniques and equipment, enforcement of quality and for training and research. Further, it has participated in a number of national and international exhibitions for this purpose. In September 1955, the Board organized a Handicrafts Week, in which competitions were held and prizes awarded for the best products.

quality and for training and research. Further, it has

During the second Five Year Plan, it is proposed to undertake further schemes for the improvement of designs and to organize regional designing centres. Assistance will be provided to art schools and technical research institutes. Improved equipment will be supplied to artisans. Several measures have been formulated for improving marketing arrangements, such as the setting up of new emporia, sales depots and craft museums, the provision of mobile vans to serve rural markets and participation in international exhibitions and fairs. Special attention will also be paid to the development of co-operatives for the marketing of handicrafts. The entire scheme is expected to cost about Rs 110 million.

CHAPTER VII

DANCING

Dancing occupies an unique place among the arts. Combining action, song, melody, rhythm and harmony, it offers the most complete expression of the cultural life of a people. In India it forms an integral part of living, having both a spiritual and a social significance. The realization of spiritual ends through the exercise of the senses is, generally speaking, the motive behind Indian art.

Indian dancing did not at first exist as an independent art. It acquired meaning only as an element in man's relationship with God. Originally dancing formed part of the Vedic ritual. It was accompanied by the chanting of sacred hymns in rites solemnizing sacrifices, marriages and other sacred occasions. As it developed, this ritual fell upon the *devadasis* (literally, devotees of God) as a sacred duty. The *devadasis* at that time were something like the vestal virgins of Rome. They were attached to the temples, worshipping the Lord and dancing for Him. Owing to economic reasons, this sacred calling lost its nobility, and the art suffered a decline.

Intricate footwork is an integral part of all Indian dancing. In general, it varies to suit the *mudras* (gestures) which symobolize the emotion or idea to be communicated. Footwork is governed by *talas, i.e.,* by a system of timing emphasized by stresses or beats. The dance is arranged according to a certain rhythm with a number of fixed beats. In between these beats, the dancer provides with his or her footwork what are known as bell-idioms. These bell-idioms have no meaning as such, but convey an inner rhythm of their own, the music so created contributing towards the total effect. *Mudras,* facial expressions and footwork converge in the dance into a unity of expression.

There are four major schools of dancing in India—the Bharata Natyam of Tanjore, the Kathakali of Malabar, the Kathak of North India and the Manipuri of Eastern India.

BHARATA NATYAM

Bharata Natyam is the most important of the classical dances, because of its religious associations. It has a highly intricate technique and its own rigid code of style and gesture. Originally, *devadasis* performed this dance in temples as one of the rites of worship. With the decline of the *devadasi* calling Bharata Natyam also waned. Happily, however, recent times have brought it to the fore, but it is not oriented any longer to an exclusive religious purpose.

The dance consists of five main items. Beginning with *nrit* or the enactment of graceful poses and gestures, the dancer passes on to a rendering of ideas in pantomime, ending with an erotic motif, usually an imitation of love play among the gods. Curiously enough, the incandescent physical love of the gods depicted by Bharata Natyam has a devotional character. A single performance of this dance lasts as long as four hours. There is no abrupt break between the various items, and the music is provided by the *mridangam* (a percussion instrument), cymbals and the *tambura*, a later addition. Costumes are so chosen as to create an effect of exalted splendour. Rukmini Devi, Shanta Rao, Ram Gopal and Mrinalini Sarabhai, to mention only a few, are among the well-known exponents of modern Bharata Natyam. They have simplified its elaborate technique and occasionally employ it for secular themes.

KATHAKALI

Kathakali is essentially a pantomimic dance and may be regarded as the counterpart of the ballet in the West. Acting plays as much a part in it as pure dancing. It is generally performed in the open and usually lasts a whole night. The themes chosen are legends from Hindu mythology in which some of the characters assume superhuman dimensions. The most elaborate make-up is therefore employed. Great skill and ingenuity in the use of colours is displayed in the facial masks, which suggest beings from another world. The effects produced are exaggerated and, were it not for their poignancy, even grotesque. The costumes again show a profusion of variety and colour, while the orchestra is a simple one, consisting of drums, cymbals and two singers. These singers supply the lines and the dancer the interpretation. Of scenic arrangements there are almost none, for the actor is expected to create the necessary effects by his skill in suggestion. The earth and the sky form the stage against which Kathakali is performed. The choice of its themes and simplicity of its arrangements gives this the character of a folk dance.

KATHAK

The traditional Kathak dance has its origin in the devotional dances of Rajasthan and Uttar Pradesh. It was originally part of the worship in the temples, performed by the devotees of Krishna. They would recite the story (*kathak*) in praise of the Lord and interpret it in dance.

With the Muslim invasion Kathak suffered a complete eclipse for some time, till it was revived by the Mughal rulers in a slightly different form. The Mughal court, with its love of ease and pleasure, left its mark upon Kathak. It left its association with the temple and became a secular art. The skill of the dancer in displaying fast and intricate foot movements with a complicated time measure become the criterion of a good performance.

A Kathak performance consists of *ganesh vandana* (invocation), *amad* (commencement of the dance and introduction of rhythmic syllables), *parans* (intricate rhythmic patterns) and *tatkar* (footwork). Its subject matter is drawn from the episodes of the life of Krishna. Shambhu Maharaj is one of the greatest living exponents of Kathak.

MANIPURI

Manipuri, the home of which is in eastern India, is the dance of nature lovers. It celebrates the diverse mood of nature—the changing seasons, the vernal breeze, the winter's haze, the warmth-giving sun and the monsoon. It originated as a folk art, but in the course of the centuries it has developed a highly complicated technique. It is now ranked with other classical dances like Bharata Natyam and Kathakali.

The Manipuris have a variety of dances in which both men and women take part. Their well-known classical dance, however, is *raas,* in which only women participate. *Raas* combines acting, singing and dancing. The stories of Krishna's amorous sport with Radha and the *gopis* (milk-maids) are depicted in the dance. The spiritual bliss of paradise is re-created in song and dance as the dancers enter the stage in picturesque costumes and depict episodes from Krishna's early life at Brindaban, near Mathura. Music is provided mainly by the *pung,* though other percussion instruments are also used. Gentle swinging movements and quick rhythmic steps distinguish this style of dancing.

The latest development in the modern period is the emergence of the Indian ballet. On the basis of a study of indigenous dance forms, together with a study of Indian sculptures and paintings and training from European ballet, Uday Shankar has produced ballets such as the *Rhythm of Life* and *Labour and Machinery,* besides others based on mythological themes like *Shiva Paravati Nritya Divanda and The Renunciation,* based on the life story of the Buddha. The Indian ballet has brought about a synthesis of the lyricism, grace and pictorial quality of Indian dance forms, both classical and folk, and the most modern stage techniques.

Several academies and institutions in the country impart training in the different systems and their modern variants, and the dance in India is thus regaining lost ground. The Government is also taking a great deal of interest in this branch of Indian art. The Academy of Dance, Drama and Music has been doing much for the encouragement of these arts. The Ministry of Education also has instituted scholarships to help talented students.

CHAPTER VIII

THEATRE

In the palaces and temples of ancient India, Sanskrit plays were performed to entertain both royalty and the people. The oldest and most developed dramatic art of India is the dance-drama, in which religious and philosophical concepts are interpreted through song, dance and gesture. *Natya* and *nataka*, Sanskrit words meaning drama, come from *nritya*—dance . While dancing was thus an essential element of drama, music and song added a lyrical note to situation and setting.

The exclusion of tragedy and the need to conform to moralistic virtue imposed severe limitations on the Sanskrit theatre. The Hindu theatre, however, displayed a wider range in choice of theme and treatment. Skits, farces, sparkling comedies and intense melodramas comprised its repertoire. The use of properties was symbolic and the absence of scenic effects made for a versatile histrionic technique. As the most subtle interplay of emotions was conveyed through facial expression and gestures, the need for masks was precluded. With their exquisite idealism and idyllic setting, Kalidasa's *Shakuntala* and Shudraka's *The Little Clay Cart* are typical creations.

It may be added here that the ancient Indian theatre was a very elaborate affair. The theatre halls were carefully constructed and decorated according to traditional rules of architecture. The middle-size theatre, according to Bharta, could accommodate 400 spectators. Some of the more elaborate stages had two storeys, the first for the representation of action in the celestial sphere and the second for that in the terrestrial sphere. The concept of tragedy in the Greek sense was absent in Indian plays. No death was permitted on the stage. Indecorous action was also forbidden, for "a drama is to be witnessed by the father and the son, the mother-in-law and daughter-in-law, all sitting together".

With the passing of the early Hindu kingdoms and the Muslim invasions of the North, the dramatic tradition almost died in North India. It, however, continued to thrive in south India and south-east Asian countries, where it survives even today. In the North, operatic plays performed by village bands became popular. Sanskrit plays continued to be studied in schools, but were never staged. In the operatic plays the compact construction and consistent characterization of Sanskrit drama were replaced by haphazard incidents and farcical devices. Embodying mythological themes, they were either improvised by amateurs or performed by itinerant professionals. They were enacted in the open. The play started at nightfall and ended in the small hours of the morning. There was, of course, nothing like a scenic background, but the plays gained colour and atmosphere in the glare of torches under the starlit sky. Even today the medieval tradition survives in the people's preference for characters and incidents from the *Mahabharata* and the *Ramayana*, and their love of music and song.

In the later part of the 19th century, the Indian theatre came under European influence. Calcutta led the way with scenes from Shakespeare's *Julius Caesar*. The next venture, *Othello*, was the first English play to be presented by a cast composed entirely of Indians. Then followed *Henry IV, The Merchant of Venice* and other plays like *She Stoops to Conquer* and *Beaux Stratagem.* Thanks to the generous help of Dwarkanath Tagore, grandfather of the famous poet, the first English theatre in Calcutta became possible. It was, however, in the hands of playwrights like Madhusudan Dutt and Jyotirindranath Tagore, who adapted freely from Greek, English and French sources, that the Bengali stage assimilated Western influences. In 1872, Girishchandra Ghosh organized a National Theatre which, along with similar societies, staged adaptations from Indian and English classical sources as well as historical and social plays. Later, plays by Rabindranath Tagore and Dwijendra Lal Roy dominated the Bengali stage. In consonance with the spirit of the times, Tagore broke away from English influences and created new literary forms. His dramas set fresh standards in form and content.

Though the *nautanki* and the *ras*, folk forms of the drama, were popular in the Hindustani-speaking areas, they did not have a theatre as such. This can be ascribed to the fact that the Mughals, who encouraged the other arts, did not approve of the drama for religious reasons. With the coming of the English, however, the impact of European influence gave new life to the Indian drama and producers adapted freely from Shakespeare, Ibsen and Shaw. It was from Shakespeare that the Indian stage took over romantic tragedy. In more recent times, the plays of Khwaja Ahmed Abbas have attracted audiences in northern India, but the Hindustani stage owes its most outstanding contribution to Prithvi Raj Kapoor, who has produced a series of plays combining the poetry and idealism of Tagore with the stagecraft of Uday Shankar.

Prithvi Theatres was founded by him in 1943. His three well known productions—*Deewar*, a powerful allegory on Hindu-Muslim unity, *Pathan*, a story of loyalty in the Frontier, and *Ghaddar*, a play with communal politics as its theme—are considered to be some of the best in the Indian theatre today. Prithvi Raj has influenced the modern Indian theatre a great deal and is responsible for moulding it along the lines of realistic Western drama.

The development of the modern drama movement in Hindi began with Bharatendu Harishchandra during the last decades of the 19th century. His best known plays, which enjoy great popularity even today, are *Satya Harishchandra* and *Bharat Durdasa*. Between 1900 and 1925 the playwrights who dominated Hindi drama were Aga Hashra Kashmiri, Pandit Radha Shyam Pathak, Narayan Prasad Betab, Tulsi Datt 'Shaida' and Hari Krishna 'Jauhar'. Most of their plays were written for the Parsi theatre. In recent years the influence of Jayashankar Prasad has been very pronounced. He wrote a number of plays which, however, did not lend themselves very well to staging. Dramatic activity in Hindi literary circles has been on the increase, thanks to the efforts of amateur dramatic societies. Ram Kumar Varma, Harikrishna Premi and J. C. Mathur are among the dramatists who represent the trend in Hindi drama today.

In western India, the Maharashtrian stage adapted the comedies of Moliere to the contemporary setting, while younger dramatists like Vibhakar, Varerkar and Acharya Atre have written Marathi plays on social themes. The Maharashtrian stage belongs mostly to the middle and working classes, and short plays on subjects touching their daily lives are being produced by the Natya Niketan, a group of artists and technicians.

In Gujerat, R.L.V. Desai has contributed plays on domestic and social themes that have the bare, stark intimacy of Ibsen. R. Udayaram has translated the Sanskrit classics and his play *Harishchandra* has been very popular. While K. M. Munshi's literary dramas have also enjoyed considerable success, C.C. Mehta has brought a new idiom and technique to modern Gujerati drama. The experiences of the common people form the subject matter of his plays. *Ag-gari*, one of the best known, depicts the life of railway workers.

In southern India, the Tamil stage came into being in Tanjore district about 1870, when various dramatic troupes travelled from village to village performing in improvised theatres. *Valli, Kovalan* and *Harishchandra* were among the more popular plays. In these and other plays, the accent was on vocal music, which quite often had no relevance to the play. It was in Andhra, partly under the influence of Bengal, that modern forms were evolved. The zeal for social reform which swept the arts and literature at the beginning of the 20th century found a ready vehicle in the drama. Ancient village forms were modified to suit the new writing.

During the last 10 years there has been remarkable progress in the development of the Indian theatre. With hundreds of dramatic groups in different Indian languages, the growth of a mighty theatre can be seen. About five years ago, a federal organization known as the Theatre Centre (India) was set up. Its main object is to encourage drama in the regional languages and to present to the people of India and the world the various types of Indian drama. The Theatre Centre has 42 affiliated groups, and it maintains contacts with them through 11 local centres situated in the various States. Being primarily an administrative organization, the Centre provides the liaison between the theatre groups in the country and similar organizations abroad. It is itself affiliated to the International Theatre Institute of UNESCO.

The Indian National Theatre, formed in 1946, functions in five cities and has contributed much to the modern ballet. Its treatment of Jawaharlal Nehru's *Discovery of India* and *By 1951* have proved successful.

The Delhi Art Theatre further produces operas and realistic plays, mostly in Punjabi.

In New Delhi, India's capital, and other large cities the theatre movement has received a fresh impetus at the hands of talented amateurs. Plays by moderns are staged simultaneously with plays by Shakespeare, Sheridan, etc. The capital has a busy theatre season, lasting about six months in the year, when a programme of plays in English is often usefully dovetailed into a series of Hindustani plays, either adapted or translated from Western sources. Quite as often, Hindi plays by renowned Indian playwrights are staged.

The progress achieved has been due partly to government patronage. The Sangeet Natak Akadami is assisting this growth by way of financial and other help. The Universities and the Central Ministry of Education are encouraging the amateur stage by arranging youth festivals and other dramatic activities.

CHAPTER IX

MUSIC

Only Egyptian and Chinese music have traditions comparable to that of Indian music, which has been cultivated as a living art for nearly 3,000 years. A proper recitation of the Vedic hymns was considered essential to musical accomplishment, and Buddhist and Brahmanical scriptures often speak of a highly developed musical art which was in use mostly for temporal purposes. It was during the 4th and 5th centuries, the age of the Guptas, that Sanskrit literature entered its most fruitful phase and Bharata wrote his memorable treatise on the theory of music and drama.

The ancient music of India has been handed down from the master (*guru*) to the disciple (*sishya*) through the generations and an intimate and sacred association between them was considered intrinsic to the inculcation of all Indian art. In those old days, Indian music was sung in the royal chamber, where the patron was content to hear the artist sing in response to an inner creative urge. Or, the song was heard in the sanctum of a temple as the musician offered his devotion to God. The public concert was unknown and this chamber music did not have to subserve popular taste. A guild of hereditary musicians thus grew up under the protection of an aristocratic society for its exclusive entertainment.

There are today two classical schools of Indian music, the Hindustani School of the North and the Carnatic School of the South. While the music of the North has been subject to Persian and Arabic influences. Carnatic music has preserved the purity of tradition. The Persians brought with them some fine musical instruments and their influence has enriched north Indian music. Otherwise, the differences between northern and southern music are purely one of style.

The immediate reaction of a European to a recital of

Indian vocal music is one of perplexity; he finds it both elusive and exotic. This is because the differences between Indian and Western music are fundamental; they relate to content as well as to technique. The devotion and subjectivity of Indian music are both products of a different cultural atmosphere, the *ethos* of which has been preserved for posterity in its music. For the European listener to understand the music of India it is necessary that he should understand some basic differences between the two systems.

Firstly, he should understand that Indian music is a melodic art while Western music is harmonic. Western music is like a vast building where every brick, arch and pillar falls into its appointed place to produce a unity conceived by the architect. Or, it is like a big picture the various elements of which blend to produce a well composed whole. Western music thus impresses its listener as much by its range as by its harmony. The value of a note in Western music is judged by its adaptability to the central harmony. In fact, it serves no purpose by itself. Its meaning is fixed only in relation to the other notes of the chord heard in accompaniment. Even when a Westerner hears an unaccompanied melody, a European folk-song, for example, the music becomes complete to him only when his imagination has provided the implied harmony. This is because European music is a compromise between melodic freedom and harmonic necessity. It is harmony that has made the triumphs of orchestration in the West possible.

By contrast, Indian music is purely melodic. To appreciate it, the ear must be trained to receive pure intonation. Its very nature precludes the concept of harmony, either implied or explicit. In fact, the introduction of harmony would even violate the melodic unity of a song. Melody is a peculiar quality of the voice and the greatest of Indian music is thus vocal music. The highest art is wholly extempore and the Indian musician is a creative artist. In fact, he is at once singer and poet. While rendering a particular *raga* (mode), he has considerable scope for improvisation. Unlike the musical artist in the West, whose merit lies in the exact reproduction and interpretation of the works of great composers, the Indian musician improvises within the framework of a given theme. To him, a good voice by itself is an achievement of no consequence. What a musician sings is more important to him than how he sings it.

It is not that Indian music does not recognize a good voice. Very often a singer uses a beautiful voice to advantage. Again, to the serious-minded singer, the words of a song have no intrinsic meaning of their own except in so far as they enhance or contribute to the music of the song. In this connection Dr. Ananda Coomaraswamy says: ". . . . . . they (words) are used to support the music with little regard to their own logic—precisely as the representative element in modern painting merely serves as the basis for an organization of pure form and colour". There are certain characteristics of Indian music that follow logically from its melodic nature: the primacy of the melody, a particular relation of the accompaniments to the song, the importance attached to improvisation and the absence of any serious concerted music. Another feature of Indian music is its elaborate grace. To the Western observer, who is used to hearing a number of notes simultaneously, grace appears to be a superfluous elaboration, especially when it does not form part of the main structure and is merely added to the note.

Finally, to quote an expert on the relation between melody and harmony: "In Western music, a melodic line is really the top of a surface line of a carefully constructed harmonic structure. Thus, in the building of melody, the harmonic implication of substantive passing notes and the relationship of these play an important part. Western melody tends to develop round notes which are harmonically related. Indian music......is even refractory to the laws which govern Western melody."

The Indian melody is governed by the *raga*. Its nearest equivalent in Western musical parlance would be a "mode". But the *raga* is a more definite concept. It has been defined "as the melody-mould or the ground plan" of a song which the master first of all communicates to the pupil and "to sing is to improvise upon the theme thus defined". It is a selection of five, six or seven notes distributed along the scale. The notes and their sequence are thus both important, and there is no modulation of any kind. Modulation and a free change of key are indeed the conditions of harmony, as in Western music. In all, there are 72 septatonic *ragas* and each of them is the basis of several pentatonic and hexatonic *ragas.*

The *ragas* have an interesting origin. Some, like the *pahari,* are derived from folk-songs, while others like the *jog* are based on the songs of wandering ascetics. Literally translated, the names of some would read as follows: Spring, Evening Beauty, Honey Flower, etc. There are some *ragas* which excite devotional moods. Others are amorous in their inspiration.

The theme of Indian music is another respect in which it differs from Western music. A piece of Western music can tell a story or depict an external situation. It is thus the objectified story of an observer beholding a world without. As opposed to this, Indian music is real or relevant only in subjective terms. It employs the method of suggestion and not description. It is therefore no accident that the preponderant theme of Indian music should be human and divine love. Actually, the two are not considered mutually incompatible for they both refer to the intense participation characteristic of valid human relationships. Underlying all classical Indian art there is a suggestion that the erotic and spiritual instincts in man are essentially allied and derive from a common basis.

MUSICAL INSTRUMENTS

One should not, however, conclude that instrumental music does not exist in India or that it is not highly developed. The variety and number of the musical instruments in use in India rival those of Europe. Of these, the *vina* is probably the most outstanding. Legend has it that the Goddess Saraswati is eternally playing upon her *vina* to amuse her lord and herself. There are two varieties of this instrument in popular use today, one in the North and the other in the South. It consists of a fret-board mounted on two large gourds and seven strings. Four of them actually pass over the frets, while the other three serve as a drone to provide a pedal-point background. The instrument is played by deflection of the strings, which are plucked by the right hand, and the notes made with the left. It is capable of an infinite number of nuances of microtonal grace.

The *sitar* is a popular stringed instrument in north India. Its invention is credited to a Persian poet at the court of Ala-ud-Din Khilji in the 14th century. It has seven strings and is played by metal nails fixed to the player's fingers.

The *sarod* is in common use in Bengal, Uttar Pradesh and the Punjab. It has a deep-seated tone and is played with a plectrum.

The *mridangam* is perhaps tne most developed and the most ancient of all percussion instruments in the country. It served as a drum for chamber music in former times but is now used as an accompaniment for both vocal and instrumental music. The *mridangam* of the South and *pakhawaj* of the North are designed on the same principles and differ only in minor details.

STATE PATRONAGE

Since independence, the Government of India has been taking active steps to foster music and to promote a sense of music consciousness among the people. With this end in view it set up, in January 1953, a Sangeet Natak Akadami which, among other activities, holds music festivals and recommends to the President the names of eminent musicians for yearly awards in Hindustani and Carnatic music. It is also building up a library of classical music by recording the leading musicians of all schools and by collecting old gramophone records of the masters.

In recent years, the radio has made a signal contribution to the development of music. When, with the disappearance of the princely States in independent India, music artists lost their most important patrons, All India Radio came forward to fill the vacuum and extended its patronage to them. Today almost all important classical and light music artists broadcast their programmes from the stations of AIR, and a large number serve on its staff as composers, instrumentalists or vocal artists.

AIR is also making an effort to promote a taste for good music among its listeners. In July 1952, it inaugurated an annual programme of National Music from Delhi, which is relayed by all other stations. The main function of this programme is to give the entire country an opportunity to listen to the best music artists in the land. Since both Hindustani and Carnatic music are broadcast in this programme, it serves to promote a better understanding of the two systems, thereby strengthening the bonds of cultural unity. Of late, the scope of this programme has been extended to include regional forms of devotional and folk music.

All India Radio is further attempting to inculcate love fresh ground. An AIR *vadya vrinda* (orchestra), includtion programmes, musical features, *sangeet sammelans* (singing gatherings) and concerts to which audiences are invited. To encourage younger artists and to find new talent for radio stations, competitions in Hindustani and Carnatic music are organized each year.

Besides preserving, developing and popularizing traditional music, the radio has also made an attempt to break fresh ground. An AIR *vadya vrinda* (orchestra), including artists both from the South and the North, has been set up and experiments are being made to explore possibilities of creating a synthesis between the Hindustani and Carnatic systems.

Thematic and mood music is being composed for the *vadya vrinda* and new horizons are being opened up with the tentative introduction of harmony, a musical concept that has hitherto been foreign to the Indian ear.

CHAPTER X

RADIO

Broadcasting in India dates back to 1927, when two radio stations were opened at Bombay and Calcutta by the Indian Broadcasting Company. Financial difficulties, however, soon overtook this company, and it went into liquidation in March 1930. Thereafter the Government of India assumed direct responsibility for broadcasting as a State monopoly.

The development of the service was slow in the initial stages. At the time of partition in 1947 India was left with only six radio stations at Bombay, Calcutta, Madras, Delhi, Lucknow and Trichinopoly.

Today there are 27 radio stations, covering all the important linguistic areas and broadcasting programmes in the home services to cover a million radio owners and about 23,000 community groups in villages, schools and factories. The total number of medium and short-wave transmitters is 28 and 17, respectively, some stations having more than one transmitter. India occupies third position among users of broadcasting frequencies in the world. The stations are grouped into four regions—North, West, South and East. The names of the stations in each region are as follows:—

North—Delhi, Lucknow, Allahabad, Patna, Jullundur, Jaipur-Ajmer, Simla, Indore and Bhopal.

South—Madras, Tiruchirapalli, Vijayawada, Tri-Vandrum-Kozhikode, Hyderabad and Bangalore.

West—Bombay, Nagpur, Ahmedabad-Baroda, Dharwar, Poona and Rajkot.

East—Calcutta, Cuttack and Gauhati-Shillong.

In addition to the above, Kashmir State has two stations at Srinagar and Jammu.

PROGRAMMES

The various schools of music are brought nearer each other through the annual Radio Music Festival, which has become an important cultural institution during the past four years. Likewise, mutual understanding of the different regional literatures has been promoted through the Radio Literary Festival, the first of which was held in 1956. The annual Radio Week seeks to mirror the multifarious activities of All India Radio.

At present, programmes are broadcast from different radio stations for six to ten hours a day. It is, however, proposed to extend these timings shortly to arrange for round-the-clock broadcasts. The aim of the AIR programme policy is to entertain the people and also to cater to their cultural and educational needs. In the news broadcasts, items are selected for their news value and all politics of a contraversial or partisan nature are avoided. AIR does not also accept sponsored broadcasts or any matter that amounts to commercial advertising.

Within the frame-work of the above policy, the stations of AIR present programmes of music, talks, dramas, features, discussions, news and other important broadcasts. Special programmes are broadcast for specific audiences such as women, children, villagers, troops, industrial workers and for schools and universities. All these programmes are planned and produced in consultation with expert advisory committees.

National programmes of music, talks, dramas, news and other outstanding broadcasts, which aim at countrywide coverage, originate in Delhi and are relayed by other stations. The aim of these broadcasts is to bring to listeners throughout the country something which is representative of the best in our music, literature, drama or folk culture. The National Programme of Music, for example, brings to listeners the performances of some of the best exponents of both the Hindustani and Carnatic systems of music. Likewise, the National Programme of Drama and Operas brings to listeners some of the best plays in all the languages. Recently AIR has formed a national orchestra, which conducts experiments in thematic orchestrations and has given performances before appreciative audiences in Bombay, Calcutta and Madras.

The regional stations attempt to present the culture of their respective regions. For this reason, most of their programmes are broadcast in the local languages.

News

News bulletins in the home services of AIR are broadcast in English and Hindi four times a day, and in the regional languages at lesser intervals. In all, the News Services Division, which is today one of the largest news organizations in the world, puts out 71 daily news bulletins in 28 languages, Indian and foreign. To give wider coverage to news from the States, regional news bulletins are also broadcast from some stations. The Lucknow station, for instance, issues a bulletin in Hindi; Nagpur in Hindi and Marathi; Bombay in Marathi and Gujerati; Madras in Tamil and Telugu; Calcutta in Bengali and Bangalore in Kannada.

News-reel programmes of selected news items were introduced in 1956.

External Services

The external services of All India Radio cover programmes in 18 languages, including Afghan, Burmese, Kuoyu-Cantonese, Indonesian, Pushtu, Persian, Arabic, Swahili and French, besides English and the Indian languages. For people of Indian origin abroad there is a general service in English, Hindi, Tamil and Gujerati. For the nationals of other countries, there is a regional service in their respective tongues.

Twenty-eight news bulletins in 15 languages are also broadcast in the External Services.

To study the reactions of listeners and assess the popularity of its programmes, AIR maintains a Listener Research Unit. This conducts opinion surveys through a system of sample surveys, postal enquiries and group listening studies.

All India Radio brings out seven journals publicizing its programmes in advance for the benefit of home listeners. These are: *Indian Listener* in English, *Sarang* in Hindi, *Awaz* in Urdu, *Betar Jagat* in Bengali, *Vanoli* in Tamil, *Vani* in Telugu and *Nabhowani* in Gujerati. Besides, programme journals are published in English, Arabic, Persian, Afghan, Chinese and Burmese for the benefit of listeners abroad. The English journal *India Calling* is published in two editions—eastern and western.

AIR talks are published in *AIR Selections* and *Prasarika.*

Song and Drama Division

The Song and Drama Division is a special wing of All India Radio devoted to the stage and song with the object of carrying to the people the message of constructive national activities, such as the Five Year Plan. A large number of stage institutions all over the country are affiliated to this Division, which subsidizes the staging of approved plays and musical and poetical concerts and also arranges for training.

EXPANSION PLAN

Between 1948 and 1951 nine low power medium-wave stations were established in important cities to provide a 'pilot' service. A five-year plan for the development of broadcasting was drawn up by AIR early in 1952. It aimed at strengthening and extending the network of stations, improving the quality and variety of programmes and rationalizing the location of stations. The plan was approved by the Planning Commission in June 1952.

The expenditure sanctioned for this programme was Rs 49·9 million. Of this, up to the end of 1955-56 approximately Rs 30 million had been spent on setting up new stations and installing medium and short-wave transmitters. The second Five Year Plan provides for an expenditure of Rs 90 million for the further development of broadcasting. The aim during this period will not be to set up new stations but to extend the services now available over as wide an area as possible. In certain parts of the country short-wave transmitters will be installed.

CHAPTER XI

FILMS

The nucleus of a film industry was set up in India about 40 years ago, and today it is one of the largest medium-scale industries in the country. Altogether, it employs about 100,000 people, including expert technicians. The capital invested exceeds Rs 420 million and the pictures produced every year are estimated to bring in a gross revenue of Rs 250 million. The average cost of production of an Indian film is anything between Rs 300,000 and Rs 500,000 and a successful picture earns about Rs. 1 million. On an average, the industry provides Rs 120 million to the exchequer every year by way of censorship fees and entertainment and income-taxes.

DEVELOPMENT

The year 1913 saw the birth of the Indian film industry when Dadasaheb Phalke produced and released *Raja Harishchandra,* the first silent moving picture in India. The success of *Harishchandra* attracted many other producers to the field, and although the number of films produced in India was small compared to the number imported, their popularity grew rapidly. In 1918 the Indian Cinematograph Act was passed; nine years later the Government appointed a committee to enquire into the problems of the industry.

The release in 1931 of the first Indian talkie, *Alam Ara,* opened a new chapter in the annals of the Indian film industry. Today India is the third biggest film producer in the world. Also, the modern soundproof studio is a far cry from the make-shift structures of three decades ago. There are at present more than 60 studios, situated mostly in Bombay, Poona, Kolhapur, Madras, Calcutta, Salem and Coimbatore. Of these, 23 studios are located in Bombay, 14 in Calcutta and 14 in Madras. There are altogether 255 producing concerns and about 900 distributing agencies. Bombay is the major centre of film production, Madras and Calcutta taking second and third places, respectively. In 1955 about 47% of the total number of films were produced at Bombay, about 34% at Madras and 19% at Calcutta; 296 films were produced in 1956. Bombay is the principal centre for Hindi and Marathi films, Madras for films in Tamil and Telugu and Calcutta for Bengali films.

There are about 3,600 cinemas in the country, including about 600 touring cinemas. Recently, open air cinemas capable of accommodating audiences of three to four thousand each have been set up in the big cities. Approximately 275 pictures are produced and released every year and more than 200 million feet of raw film used. The Bengali film industry is the second largest in the country, that of Hindi being the first. The other languages in which a considerable number of films are produced are Tamil, Telugu and Marathi.

The earlier pictures confined themselves to mythological themes and classical dramas. It was not until late in the thirties that film producers found it profitable to employ social themes. The reformative phase has now passed and the musical comedy, which suffers from lack of plot and characterization, is increasingly becoming a feature of Indian films, particularly in Hindi. The music is made up of both Indian and Western elements. Judged by the norms of either of the classical traditions it cannot be considered pure, but it is extremely popular. The serious-minded producer is not, however, a rarity.

FILM ENQUIRY COMMITTEE

In 1949, the Central Government set up a Film Enquiry Committee to review the affairs of the industry and devise means of placing it on a sound basis. The Committee, which submitted its report in 1951, recommended the establishment of a statutory Film Council to serve as the central authority for the superintendence and regulation of the industry. The Council would have a nucleus of subordinate agencies, such as a Production Code Administration, to supervise and guide the actual production of a picture in its various stages, a Film Institute for training personnel in the art and technique of film production, a research section, library service, story bureau, casting bureau and various panels for educational films, shorts, exhibition films, etc. In order to remove the financial difficulties of producers, the Committee suggested the establishment of a Film Finance Corporation. Other suggestions included the institution of State Awards for quality films, manufacture of raw film and other equipment and special attention to children's films. The Government of India has accepted the majority of the recommendations, some in modified form, and is taking steps to implement them.

STATE AWARDS

State Film Awards were instituted in 1954. The Awards include two President's Gold Medals, one each for the best feature film and the best documentary during the year, and the Prime Minister's Gold Medal for the best children's film of the year. Certificates of Merit are awarded to the two next best films in the all-India category. Besides, President's Silver Medals and Certificates of Merit are awarded to the second and third best films, respectively, in each of the regional languages.

During the past three years, *Shyamchi Aai* (Marathi) *Mirza Ghalib* (Hindi) and *Pather Panchali* (Bengali) have been awarded the President's Gold Medals for the best feature film in 1954, 1955 and 1956, respectively. The documentaries that won these Gold Medals were *Mahabalipuram, Spirit of the Loom* and *Magic of Mountains*, all three produced by the Films Division. The feature films which received the President's Silver Medal were *Mirza Ghalib* (Hindi), *Neelakkuyil* (Malayalam), *Chheley Kaar* (Bengali), *Malaikkallan* (Tamil), *Mahatma Phule* (Marathi), *Peddamanushulu* (Telugu), *Pather Panchali* (Bengali), *Jhanak Jhanak Payal Baje* (Hindi), *Mee Tulas Tuzya Angani* (Marathi) and *Bangaru Papa* (Telugu). The feature films which received All-India Certificates of Merit were *Do Bigha Zamin* (Hindi), *Bhagwan Shrikrishna Chaitanya* (Bengali), Neelakkuyil (Malayalam), *Biraj Bahu* (Hindi), *Jhanak Jhanak Payal Baje* (Hindi) and *Shirdiche Shri Sai Baha* (Marathi). Among the documentaries, *Holy Himalayas*, *Tree of Wealth*, *Darjeeling*, *The Golden River*, *Wonder of Work* and *Education for Life*—the first five produced by the Films Division—won All-India Certificates. No children's film has so far qualified for the Prime Minister's Gold Medal. However, *Khelaghar* (Bengali) was awarded a Certificate of Merit in 1954.

A Children's Film Society was set up in May 1955 to produce films for children. The Society has already started production, through private concerns, of feature films as well as adaptations of foreign films. It produced one feature film, *Char Dost*, in 1956, and has started production of a second, entitled *Jal-deep* (Lighthouse).

NATIONAL FILM BOARD

The Government proposes to take measures for the implementation of other recommendations. Dr. Keskar, Union Minister for Information and Broadcasting, announced: "It is proposed first of all to establish a National Film Board. The Board will have as its constituent units the present censorship organization, a Production Bureau which will help producers in looking through scripts in an advisory capacity and a Film Institute. The Film Institute will be a centre for giving expert and technical training to photographers and other technicians of the film industry.... Another important step proposed to be taken by the Government is to form a Film Finance Corporation on a small scale. We expect that during the course of the next five to eight years the Corporation will be able to have a capital of nearly a crore (10 million) of rupees."

Comprehensive legislation in this respect is well under way. The second Five Year Plan has made provision for the development of the cinema as a medium of mass education. A scheme to manufacture raw film and projectors is being considered. There is also a proposal for setting up a Film Finance Corporation for rendering financial assistance to film producers by way of loans.

FILMS DIVISION

The Films Division of the Ministry of Information and Broadcasting produces news-reels and documentary films dealing with Indian life and affairs. Till the end of 1955, the Division had produced 376 news-reels and 264 documentaries.

News-reels are produced with material received from the cameramen of the Division stationed in important cities in the country, and from news-reel organizations in other countries with whom the Division has arrangements for exchange. A news-reel is produced every week. A quarterly edition, spotlighting the economic, agricultural and industrial progress of the country under the Five Year Plans, is produced specially for rural audiences, besides a monthly edition for the use of Indian Missions abroad. Occasionally, items of outstanding news importance are released as 'specials'.

During 1956, the Films Division produced 61 documentary films through its own units and 13 were taken for distribution from the State Governments. A children's magazine was also produced. A full-length documentary entitled *Gautama the Buddha,* based on monuments, paintings, etc., was released on the occasion of the 2500th Buddha anniversary celebrations. Two more full-length documentaries on folk dances of India and the Republic Day celebrations are under production.

A cartoon film unit for the production of shorts for children and instructional films involving graphic representations has been set up. Training in direction, photography, sound-recording and cartoon film-making has also been started in the Division for a limited number of students.

FILM FESTIVALS

Indian films—both documentaries and feature films—have participated in many International Film Festivals and have received international recognition. Recently, a feature film entitled *Boot Polish* received special mention for the acting of one of the child stars at the Festival at Cannes in April 1956. At Phnom Penh, the second prize was awarded to *Boot Polish* and the Film Division's documentary *Symphony of Life* secured a prize for the film with the best music. The Bengali feature film *Pather Panchali* obtained a prize as the best human document at the Cannes Festival. A documentary film in colour, entitled *Spring in Kashmir,* produced by the Films Division, was awarded the Silver Bear at the Berlin Film Festival in June 1956. The documentary *Symphony of Life* obtained first prize at the Art Films Festival at Montevideo in 1956, and the documentary *Khajuraho* got a prize at Manila the same year. The full-length documentary *Bharat Darshan* won the prize for "Friendship Among Nations" at the Karlovy Vary Festival in 1956.

An International Film Festival was organized in India in 1952. Symposia on various aspects of film production are also arranged by the Government from time to time.

CHAPTER XII

THE PRESS

On the morning of January 29, 1780, a few copies of a newspaper were sold in the streets of Calcutta for the first time in the country's history. It was the *Bengal Gazette,* edited and published by James Augustin Hicky. The *Gazette* was less remarkable for its restraint than for its pioneering efforts, but in partial extenuation of Hicky's "scurrilous and slanderous" writing it has been said that "he did little more than add spice to a style common elsewhere". An infamous encounter with Warren Hastings landed him in gaol and led to the confiscation of his types.

The printing press in India is, however, much older than its first newspaper. The Portuguese brought the printing press with them in 1556. Yet, till quite late, its use was restricted to the production of religious literature. But the beginnings of a newspaper press can be traced back to the times of the Emperor Aurangzeb, who maintained a kind of official gazette. In addition to postings and transfers of government servants, it occasionally published news of public importance.

Loosely applied, the term "Indian Press" conceals a considerable diversity of purpose and contest. There was the so-called Anglo-Indian press which, notwithstanding its unpopular political views, is still remembered for its distinctive contribution to the development of the press in this country. These newspapers were in the beginning edited and managed exclusively by Englishmen. There was a host of other publications, often short-lived, owing allegiance to the nationalist cause and edited and run by Indians, most of whom were men of determination and public purpose. Undaunted by the swaying fortunes of their ventures, they persevered in the furtherance of the cause of freedom. There was also the "vernacular" press, which grew up against heavy odds. Technical difficulties, lack of capital and restrictive legislation placed severe limitations on its quality and development.

ENGLISH-OWNED PRESS

The first journals published in this country were started in Bengal. Being the principal presidency town, Calcutta had a British population which was large enough to support new journalistic enterprises. Such newspapers, started mostly for the benefit of the British in India, were more often than not ancillary to British commercial interests. They kept the Englishman posted with news of his home country and were almost universally distinguished by brusque indifference to Indian affairs. The absence of sympathy for the country and its people was occasionally relieved by a few contributions from disinterested Englishmen who vouchsafed to enquire into the conditions of Indian life.

Hickey's venture was followed by a number of others in quick succession. The most significant of these was *John Bull in the East*, begun in 1821 by a group of British merchants who sought to usher in badly needed standards of moderation in journalistic writing. The name was later changed to *The Englishman* by Stocqueller, editor at that time. It was *The Englishman* that published Macaulay's essays written during his stay in India. The paper was controlled by three successive generations of the Saunders family before it was bought by the proprietors of *The Statesman* in the twenties of the present century and finally merged in it.

In 1789, *The Bombay Herald* was started in Bombay. *The Bombay Courier* followed soon after, and it retained its identity till 1861, when it was incorporated with *The Times of India*. The other enterprises were mostly short-lived because of frequent repressive action taken by the British Indian Government against their editors. The *Bombay Courier* and *The Bombay Gazette*, which set high standards in journalism, were devoted mostly to the discussion of administrative problems. They counted among their regular contributors several officials of the Government, who were then permitted to write for newspapers. The proprietorship of *The Times of India* changed hands more than once before it finally passed into the hands of Messrs. Bennet Coleman & Co.

In 1817, *The Friend of India* was started by a few missionaries in Calcutta. The paper was ultimately taken over by Robert Knight, who had come to Calcutta to found *The Statesman*. His moderate support of local causes estranged him from his own countrymen but earned him the esteem of a large body of Indian readers.

In 1907, *The Statesman* installed the first rotary and linotype machine. Hitherto, newspapers in India had not aimed at anything beyond a limited local leadership. Forme by forme they were printed slowly on flat-bed machines, but owing to the high cost of production they could not be sold for less than four annas. The Knight brothers could now afford to sell *The Statesman* for an anna a copy and its circulation grew apace. From a local organ, *The Statesman* had by then established its own cable service from England, which further added to its popularity.

In 1872, the first issue of *The Civil and Military Gazette* was published from Simla. The concern was subsequently transferred to Lahore and came to be linked with *The Pioneer* of Lucknow. The fact that Rudyard Kipling was associated with them for some time invested these papers with a certain importance in retrospect. Conservative in their outlook, they were staunch supporters of the policy and objectives of the Government and did not as such find much favour with Indian readers. Right from their inception they voiced the views of the land-owning classes. Similarly, *The Madras Times* and *The Mail*, first published in 1868, were exclusive organs of British conservative opinion.

NATIONALIST PRESS

The development of the nationalist press was conditioned by the political stimulus that gave rise to it. Different people at various times started newspapers with the express purpose of organizing opposition to foreign rule. Some wrote with biting sarcasm of the miserable conditions of plantation labour, while others advanced logically argued cases for the Indianization of the services. As political consciousness developed, uncompromising demands for the transfer of power were put forward. There were some who were content with Home Rule and constitutional remedies, but there were others who hinted at revolutionary change. In spite of their poor technical equipment and the ill-concealed hostility of the rulers, they continued to provide a valuable link between the people and their leaders. Editors were sent to prison without trial and papers were forced to close. The nationalist press, however, had an innate vitality and stringent legislation failed to detract from its strength.

Raja Ram Mohan Roy was a pioneer of the nationalist press in India. The *Sambad Kaumudi*, published by him in Bengali in 1821, and the *Mirat-ul-Akbar* in Persian in 1822 were both devoted to critical discussion of contemporary social life and its reform. About the same time, Fardoonji Murzban started a daily newspaper, the *Bombay Samachar*. Thanks to its liberal nationalist views, its popularity steadily increased and it has survived to the present day. In 1951, Dadabhai Naoroji, an outstanding man and one of the founders of the Indian National Congress, started the *Rast Goftar*.

In 1858, the *Shome Prakash* commenced publication in Bengal under the editorship of Ishwarchandra Vidyasagar. A keen social reformer, he fearlessly advocated the cause of the peasantry when disturbances broke out in the indigo-growing areas of Bengal. The Indian Councils Act of 1861 sought to associate Indians more closely with the administration of the country. As a result, the politically conscious section in society became increasingly vocal and newspapers sprang up everywhere. In 1868, the Ghoss brothers founded the *Amrita Bazar Patrika*, and their immediate success induced them to shift to Calcutta, where their influence steadily grew. There they aroused the opposition of the Lieutenant-Governor, who passed a stringent Press Act, making journalism in an Indian language virtually impossible in the province. The *Patrika* took up the challenge promptly and transformed itself overnight into an English newspaper. Owing to its universal unpopularity, the new Act, however, was soon repealed. In 1879, Surendranath Banerjee assumed the editorship of the *Bengalee*, and his persuasive writing won him an immediate following.

With the founding of the Indian National Congress in 1885, organized opposition to foreign rule crystallized. Through vivid reporting and outspoken editorials, newspapers drew the attention of the enlightened middle class to the weak spots of the administration and the appalling poverty of the people.

It was inevitable that the emergence of a broad-based national movement should have led to the growth of an extreme and moderate wing within the Congress. For instance, Bal Gangadhar Tilak, Bipin Chandra Pal, Aurobindo Ghose and Lajpat Rai belonged to the militant school of nationalism. Tilak used the *Kesari*, a Marathi journal founded by him, to propound a new method of struggle against the authorities. In Bengal, the *Bande Mataram* in English, and the *Jugantar* and *Sandhya* in Bengali came to the fore with their advocacy of extreme methods. Together they strongly opposed the proposed partition of Bengal and lent valuable support to the Swadeshi movement.

The differences between the extreme and moderate elements came to a head at the Surat session of the Indian National Congress in 1907. Sir Pherozeshah Mehta and Gokhale, who represented the liberal wing, felt the need for an independent organ to propagate their views. Accordingly, *The Bombay Chronicle* was started, with B. G. Horniman as editor. Though the *Chronicle* was meant to be a liberal paper, Horniman often excited the wrath of the bureaucracy through his outspoken writing.

Mahatma Gandhi and the liberals decided to support the British Government and its policies during World War I. Tilak dissented, and sought to secure immediate self-government through a country-wide agitation. He received considerable support from Mrs. Annie Besant, who bought the *Madras Standard* and renamed it *New India*. Her writings carried an irresistible emotional appeal and were probably among the best to be written in support of the Home Rule Movement.

During World War I, several newspapers came in for harsh treatment at the hands of the British Indian Government. Maulana Mohammed Ali, editor of the *Comrade*, and Maulana Abul Kalam Azad, who was then editing the *Al-Hilal*, were interned without trial. Because of punitive legislation, the nationalist press suffered a severe setback. The moderate section of the press, represented by Surendranath Banerjee, C. Y. Chintamani and Madan Mohan Malaviya, however, kept the movement alive by avoiding a serious clash with the over-sensitive authorities. With a formidable memory for constitutional precedents, Chintamani in particular was able to render signal service to the nationalist cause.

The satyagraha movement against the Rowlatt Act, led by Mahatma Gandhi, Motilal Nehru, the Ali brothers and others contributed to a further expansion of the nationalist press. Mahatma Gandhi took over the *Young India* from its editor and, along with the *Harijan*, it subsequently became the authentic organ of Gandhian ideals. In 1919, Motilal Nehru founded the *Independent* at Allahabad. The *Aj*, a Hindi daily, also came out about the same time.

When the non-cooperation movement came to an end, C. R. Das and Motilal Nehru formed the Swaraj Party within the Congress. They wanted to carry the battle against the Government into the legislatures, while others were against any form of co-operation with the Government. The Swaraj Party acquired *The Hindustan Times*, with K. M. Panikkar as its editor, and for some time the paper propagated the views of Das and Motilal Nehru. The *Swadesamitran*, a Tamil daily from Madras and the *Forward* of C. R. Das from Calcutta also belonged to the Swarajist group.

In the south, C. Rajagopalachari and T. Prakasam developed the *Swarajya* into an effective weapon for the Congress. It was also at this time that *The Hindu* became a powerful influence in Madras. While according critical support to the policies of the Congress, it fought clear of partisan loyalties and eventually became one of the best edited papers in the country.

In 1930, Sadanand started *The Free Press Journal*, at first devoted solely to publication of news of Mahatma Ghandhi's satyagraha movement.

In the thirties, several newspapers were started to voice the views of the Muslim League, the *Star of India*, the *Dawn* and the *Morning News* being prominent examples. With the transfer of power they moved to Pakistan.

LANGUAGE PAPERS

The history of the Indian language papers is a chequered one, and they have advanced considerably both in quality and numbers. The main obstacle to their growth in recent times has been technical. Because of the larger number of characters, type-setting by machines for Indian scripts presents difficulties. Attempts are being made to bring the total number of characters normally used in Indian scripts within the capacity of line-casting machines. Such machines casting single types are available for the Devanagri, Urdu, Bengali, Gujerati, Tamil and Telugu scripts.

Bengali was the first language which exploited the linotype, and much of the prosperity of the *Ananda Bazar Patrika* and the *Jugantar* is due to their high standards of production.

Lack of adequate capital has also been a serious handicap to the growth of the language press. Because of their small circulation, inferior production and the unfamiliarity of foreign advertisers with Indian languages and scripts and the general limited availability or advertisement revenue, they have been operating under a handicap. However, several newspapers have attained a high degree of proficiency. A Tamil weekly from Madras and a daily from Bengal claim the largest circulation of news journals in the country.

NEWS AGENCIES

The better known Indian news agencies are the *United Press of India,* which has been operating since 1933, and the *Press Trust of India,* owned by Indian newspapers, which was formed in 1948. The latter bought over the combined *Reuters* and *Associated Press of India* business in this country in February 1949. Of more recent origin, the *Hindusthan Samachar* has been operating a Hindi teleprinter service between Delhi, Lucknow and Patna.

Foreign news agencies like *Reuters,* the *Associated Press of America, Agence France Press* and *NAFEN* have made arrangements for the distribution of their world services in India. A large number of foreign press correspondents representing 56 foreign newspapers of 14 countries and 22 foreign news agencies are in Delhi.

PRESS COMMISSION

The Government of India appointed a Press Commission in September 1952 to enquire into the working of the press, on the lines of the Royal Commission on the Press in the United Kingdom. According to this Commission, which published its report in July 1954, 330 dailies, 1,189 weeklies, 1,685 monthlies and about 1,500 other periodicals were being published in this country on January 1, 1853.

Most of these are published in English, Hindi, Bengali, Tamil, Urdu, Gujerati, Marathi and Telugu. Of these, Bengali, Tamil and Hindi papers have several technical and literary journals of high standard. The English newspapers are found in various States. Some of them claim a nation-wide circulation. Since India is a country of vast distances, each region has its own newspapers in the regional languages and English. A few, however, are published simultaneously from more than two centres and some of them have a Delhi edition.

More than half the circulation of the papers is concentrated in the major towns and capitals of States and their penetration into the rural areas is very small. Even the production of newspapers is primarily confined in the metropolitan towns and major cities. The Commission felt that the number of newspapers in the country should greatly increase and that more newspapers should come up in the district towns.

The capital invested in the daily press in the country was estimated by the Commission at about Rs. 70 million and capital raised in the form of loans at about Rs. 50 million. The annual revenue of the daily press was estimated at about Rs. 110 million, of which Rs. 50 million came from advertisements. The salaries and wages paid in the industry totalled more than Rs. 40 million, of which about Rs. 8½ million went to journalists.

The Commission made several recommendations for improving the working conditions of journalists in respect of minimum salaries, periods of leave, provident fund, gratuity, etc., the provision of which would help to raise the standard of journalism. It further recommended the setting up of a Press Council with these aims: (1) to safeguard the freedom of the Press and to help the press to maintain its independence: (2) to keep under review any developments likely to restrict the supply and dissemination of views of public interest and importance; (3) to censure objectionable types of journalism and to build up a code based on the highest professional standards; (4) to encourage the growth of a sense of responsibility and public service among journalists; (5) to study developments in the press which may tend towards concentration or monopoly; and (6) to promote the establishment of such common services as may from time to time appear desirable.

The Commission recommended the appointment of a Press Registrar, to whom all newspapers and periodicals should supply details of capital investment, changes in ownership, management and circulation. The Registrar should issue an annual report on the state of the press.

Other recommendations of the Commission included the introduction of a price-page schedule and other measures to eliminate unfair competition as between big and small newspapers and to secure a wider diffusion of newspaper ownership.

The Government has accepted the main recommendations of the Commission and has undertaken legislation to implement them. An Act—The Working Journalists (Conditions of Service) and Miscellaneous Provisions Act, 1955—fixing the maximum number of hours of work for journalists, pay scales, retirement and retrenchment benefits, holidays, etc., has been passed.

The Press and Registration of Books (Amendment) Act, intended to remedy practical difficulties and plug lacunae in the working of the original enactment of 1867, makes certain improvements in the procedure for registration of printing presses, books and newspapers for purposes of record as well as the preservation of copies of publications. It also provides for the setting up of an organization under a Press Registrar for the collection, maintenance and publication of information concerning newspapers.

The Prize Competitions Act, 1955, prohibits advertisements of any prize competition, except as provided in the Act, and the sale, distribution, etc., of tickets and offering of any inducements calculated to encourage people to participate in such prize competitions. The Act is applicable throughout the country except in the States of West Bengal and Jammu and Kashmir.

The Newspaper (Price Page) Act, 1956, provides for the regulation of prices charged for newspapers to prevent unfair competition.

Legislation on the formation of a Press Council has been sponsored. As given in the statement of objects and reasons, "the Press Council will be an autonomous body in the discharge of its functions and will regulate its own procedure. No disciplinary powers are given to the Council. It can only express its disapprobation and for that purpose it has been given the necessary immunities and procedural powers of holding enquiries".

The following is a list of some of the important daily newspapers in English and other Indian languages.

ENGLISH

1. Amrita Bazar Patrika

2. Assam Tribune
3. Bombay Chronicle
4. Bombay Sentinel
5. Deccan Chronicle
6. Deccan Herald
7. Eastern Times
8. Free Press Journal
9. Hindu
10. Hindusthan Standard
11. Hindustan Times
12. Hitavada
13. Indian Express
14. Indian Nation
15. Leader
16. Mail
17. Nagpur Times
18. National Herald
19. Pioneer
20. Searchlight
21. Statesman
22. Times of India
23. Tribune

ASSAMESE

1. Natun Assamiya

BENGALI

1. Ananda Bazar Patrika
2. Basumati
3. Jugantar
4. Lokasevak

GUJERAT

1. Bombay Samachar
2. Gujarat Samachar
3. Janmabhumi
4. Sandesh

HINDI

1. Amrita Patrika
2. Hindustan
3. Vishwamitra
4. Nav Bharat Times
5. Navarashtra
6. Rashtradoot
7. Aryavarta

KANNADA

1. Prajavani
2. Samyukta Karnatak
3. Tainadu
4. Vishwakarnataka

MALAYALAM

1. Desabandhu
2. Kerala Kaumadi
3. Mathrubhumi

MARATHI

1. Chitra
2. Lokamanya
3. Loksatta
4. Navashakti
5. Sakal

ORIYA

1. Prajatantra
2. Samaja

PUNJABI

1. Desh Darpan
2. Prakash

TAMIL

1. Dinamani
2. Swadesamitran
3. Thanthi
4. Nava India

TELUGU

1. Andhra Patrika
2. Andhra Prabha
3. Visalandhra

URDU

1. Daily Tej
2. Hind Samachar
3. Milap
4. Pratap
5 Rozane Hind

CHAPTER XIII

SPORT

In the realm of sport, though India is known abroad for its prowess in hockey and, to a lesser extent, as a cricketing country, there is a great deal of interest in all types of games. Every big town has numerous clubs, and in the villages wrestling, volleyball and indigenous games such as *kabaddi* are very popular.

In the past few years the Government has been taking an increasing interest in sport and spending money on promoting it. An All-India Council of Sports was set up in 1954. The Council has approved a model constitution for Sports Councils in the States.

There are several all-India organizations controlling sport, each in a particular sphere. There is a Board of Control for cricket and Federations or Associations for football, hockey (men's and women's) tennis, table tennis, badminton, basketball, volleyball, swimming, *kabaddi*, cycling, boxing, weight-lifting, shooting, gymnastics and wrestling. Most of these have branches in the States. Besides, there are six national associations controlling sports activities. These are the National Sports Club of India, the Indian Olympic Association, the Amateur Athletic Federation of India, the Services Sports Control Board, the Indian Railways Athletic Association and the Inter-University Sports Board.

The "Rajkumari Sports Coaching Scheme" was inaugurated in September 1953. Under this scheme coaches are obtained from abroad to train Indian athletes in various games. Grants from the Health Ministry for this purpose totalled Rs. 300,000 in 1955.

In 1951, the first Asian Games were held in New Delhi. Eleven countries participated. India topped the list in the team events and stood second in the individual events. The second Asian Games were held in Manila in 1954. Again India did very well.

HOCKEY

Of all games, hockey is the one in which Indians are most adept. Since the Olympic Games of 1928, India's supremacy in this sphere has never been seriously challenged, and in the latest Games she was again successful. Names like Dhyan Chand and Penniger (of the older generation) and Balbir Singh are widely known. There are numerous major hockey tournaments, the most important being the Beighton Cup and the Aga Khan Cup apart from the National Championship.

FOOTBALL

The most ardent followers of this game are in Bengal and South India, but it is popular everywhere. The most important tournaments are the I.F.A. Shield, the Durand tournament and the Rovers Cup. Foreign football teams periodically come to India, the latest visit being by a team of Russian footballers in 1955. Later an Indian team toured the Soviet Union.

CRICKET

There is tremendous popular interest in this game, and the standard of play is fairly high. India is a member of the Imperial Cricket Conference. In the past there have been many distinguished Indian cricketers such as Ranjitsinghji, Duleepsinghji, the Nawab of Pataudi, C. K. Nayudu, Merchant, Nissar, Amar Singh and Amar Nath. The best known of the present players are Umrigar, Mankad, Gupte and Ghulam Ahmed. Three Test matches were played in October-November 1956 against the official Australian team. The visitors won two of these and the third was drawn.

TENNIS

Here, too, India's standard is rising towards that of the leading nations. In 1955 and again in 1956 she reached the Inter-zone final of the Davis Cup. In 1956 India's leading player, R. Krishnan, defeated Drobny, a former champion, in the All-England Championships at Wimbledon.

BADMINTON

In badminton, Indians are among the best players in the world. In 1955, India reached the Inter-zone final of the Thomas Cup, losing at this stage to Denmark. N. Natekar is the leading badminton player.

KABADDI

Kabaddi is an indigenous team game, each team consisting of 11 players. A line is drawn half-way across the field and the players are ranged along it. One player at a time crosses into the opposing half, repeating the word *kabaddi* continuously and in the same breath. He has to touch one or more of the rival team and scramble back across the line without breathing again. If he achieves this, the opponents touched go off the field. The aim of the opposing team is to hold on to the invader till his breath gives out, in which case he has to leave.

OTHERS

Other games which have a wide following are table tennis and volleyball. Interest in athletics, too, is growing. Wrestling, as already mentioned, is very popular, and boxing tournaments are occasionally held in the big towns. In addition, India offers wonderful opportunities for all types of shooting and fishing. Polo, golf and yachting are mainly confined to the upper classes. Winter sports are held in some of the hill stations, notably in Kashmir.

CHAPTER XIV

WHO'S WHO IN THE GOVERNMENT

The following is a list of Ministers and Deputy Ministers in the Government of India:

MEMBERS OF THE CABINET

Jawaharlal Nehru: Prime Minister and Minister of External Affairs and also in charge of the Department of Atomic Energy
Abul Kalam Azad: Minister of Education and Scientific Research
Govind Ballabh Pant: Minister of Home Affairs
Morarji Desai: Minister of Commerce and Industry
Jagjivan Ram: Minister of Railways
Gulzarilal Nanda: Minister of Labour and Employment and Planning
T. T. Krishnamachari: Minister of Finance
Lal Bahadur Shastri: Minister of Transport and Communications
Swaran Singh: Minister of Steel, Mines and Fuel
K. C. Reddy:. Minister of Works, Housing and Supply
Ajit Prasad Jain: Minister of Food and Agriculture
V. K. Krishna Menon: Minister of Defence
S. K. Patil: Minister of Irrigation and Power

MINISTERS OF STATE

Satya Narayan Sinha: Minister of Parliamentary Affairs
B. V. Keskar: Minister of Information and Broadcasting
D. P. Karmarkar: Minister of Health
Panjabrao S. Deshmukh: Minister of Co-operation
K. D. Malaviya: Minister of Mines and Oil
M. C. Khanna: Minister of Rehabilitation and Minority Affairs
Nityanand Kanungo: Minister of State in the Ministry of Commerce

Raj Bahadur: Minister of State in the Ministry of Transport and Communications (Shipping)

B. N. Datar: Minister of State in the Ministry of Home Affairs

M. M. Shah: Minister of Industry

S. K. Dey: Minister of Community Development

K. L. Shrimali: Minister of State in the Ministry of Education and Scientific Research

Ashok Kumar Sen: Minister of Law

Humayun Kabir: Minister of State in the Ministry of Transport and Communications

DEPUTY MINISTERS

Surjit Singh Majithia: Deputy Minister of Defence

Abid Ali: Deputy Minister of Labour

Anil Kumar Chanda: Deputy Minister of Work, Housing and Supply

M. V. Krishnappa: Deputy Minister of Food

Jai Sukh Lal Hathi: Deputy Minister of Irrigation and Power

Satish Chandra: Deputy Minister of Commerce and Industry

Shyam Nandan Mishra: Deputy Minister of Planning

B. R. Bhagat: Deputy Minister of Finance

Mono Mohan Das: Deputy Minister of Education and Scientific Research

Shah Nawaz Khan: Deputy Minister of Railways and Transport

Mrs. Lakshmi N. Menon: Deputy Minister of External Affairs

Mrs. Violet Alva: Deputy Minister of Home Affairs

Kotha Raghuramaiah: Deputy Minister of Defence

A. M. Thomas: Deputy Minister of Food and Agriculture

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